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THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY

UNDER DIRECTION OF THE COUNCIL

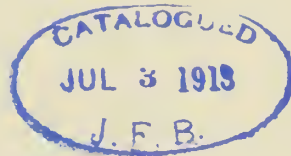
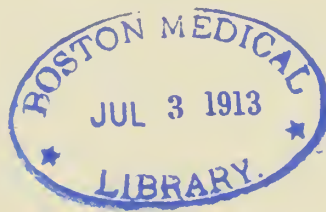
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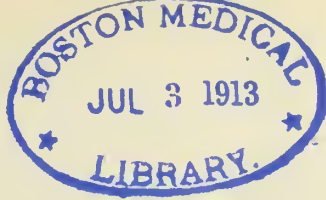
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JANUARY TO DECEMBER, 1908





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VOLUME I.

JANUARY 15, 1908.

NUMBER 1

ORIGINAL ARTICLES

THE DOCTOR.

HIS RELATION AND DUTY TO THE STATE.

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JEFFERSONVILLE, IND.

The word doctor means a teacher. A doctor of medicine means a teacher of medicine; a doctor of divinity, a teacher of divinity; and a doctor of law, a teacher of law. The writer is inclined to a broader construction or definition, for he believes that a doctor of medicine is not only a teacher of medicine, but is, or should be, a teacher and a leader in the broadest sense. The public looks upon the doctor as a storehouse of general information, which he generally is if he reaches and maintains that pinnacle of true merit and confidence that the public is inclined to give him. It is unfortunately true that a few members of our great profession have established in their own minds a lower ideal as their standard, which, of course, detracts from their real worth and reflects discredit upon the higher ambitions and ideals of the profession. No truth is more generally accepted than the fact that doctors have been teachers and architects of public opinion from the earliest history of medicine. A reverence for the true, the beautiful and the real has characterized physicians in all times. For a long time progressive medicine was handicapped by failure of students of science to emancipate themselves from the prejudices and superstitions of the times. In this connection I might quote a paragraph from an article by King in *The Nineteenth Century* for 1893: "The difficulties under which medical science labors may be estimated from the fact that dissection was forbidden by

the clergy of the Middle Ages on the grounds that it was impious to mutilate a form made in the image of God. We do not find this pious objection interfering with such mutilation when affected by means of the rack and wheel and such other clerical, rather than medical, instruments."

Higher medical education, with its ever increasing requirements for entering upon the study of medicine, is exactly the right thought and the right spirit, and should be encouraged and maintained by the members of the profession who are willing to stand by the principle of higher ideals. The writer would advocate the enactment of a law requiring all doctors to stand state board examinations once in every five years. This would serve as an incentive to doctors to establish and continue a well directed course of study and to further establish their rights and claims to the position of teacher. It would also serve to impress doctors with the importance of taking advantage of the postgraduate course, as planned by the American Medical Association, which deserves the commendation of every member of the profession. Such a law would result in the general uplifting of the scientific standard of the profession by causing those members who are capable and willing to reach the higher standard, and by eliminating those who are unwilling or incapable of maintaining a progressive position.

Such exacting regulations might be questioned, except for the fact that ours is the one profession whose duty it is to deal not only with human confidences but with human life itself. I speak of the profession of medicine advisedly, because ours is truly the only profession. The law and the ministry are not professions in the strict sense of the word, as is readily understood. They practically have no standard of legalized require-

ments, either for entering upon their study or for maintaining a higher standard after once admitted.

Another thing indicative of the firmer establishment of the principle of higher medical education and higher ideals is the establishment by many of the state medical associations of official journals, and it gives the writer pleasure to be at the christening of the first issue of *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION* and to bid those upon whose shoulders the most of the burden must of necessity rest for its success a hearty Godspeed in their mission of a general scientific uplifting.

The writer is an advocate of the idea that the doctor should take a most serious view of the business or financial side of the practice of medicine. While it is true that our profession is founded upon altruistic principles, it is also true that ultra-altruism is not sufficient to meet the exacting demands made upon doctors by the members of the various commercial interests who have been schooled in the modern rigid ideas of commercial principles. The doctor's success or failure depends upon his ability to establish and maintain a respectful supremacy, and in order to do this he must not only merit the confidence of the people in a professional way, but he must so conduct the business side of his profession as to give him recognition in the commercial circles. No man of our profession of ten years' experience would, I think, were he about to begin life over again, adopt medicine and surgery as his life work, were he actuated simply by the desire to acquire wealth. People when in sickness and distress fly instinctively to the medical man for comfort, protection and relief, and as promptly forget all about the necessity for remuneration when the danger is past and a condition of health restored. In this connection the following quotation seems appropos:

God and the doctor we alike adore
When sickness threatens us, but not before;
The danger past, both are alike requited,
God is forgotten and the doctor slighted.

Again, the doctor owes a certain duty to his state, and in order that he may be able to measure up to the standard of requirement he must of necessity combine three principles, as his duties are threefold, being scientific, commercial and political.

The members of the legal fraternity have assumed a position of legislative guidance, and they have assigned themselves the function of complete direction of the affairs of state in this respect. By reason of this assumption and their concerted effort they have, and do now, control

the making of our laws, and in every other way have piloted the ship of state. There is no good reason why this should be, either from the standard of intellectuality or equity, and the doctor owes it not alone to himself, but as a public duty and one of the fundamental duties to which he should school himself, to not only take a position, but a leading one in the commercial and political economy of his state. The great underlying principle of our social and political preference is public health, and who of all members of society is so competent to counsel wise laws, regulating and maintaining these principles, as the doctor? This should not be looked upon from a selfish standpoint with a view of personal or individual opportunity, but should be accepted by the medical profession as a great principle of duty, and there is no reason why with the present splendid organization in the State of Indiana the physicians of the state should not rise to the full measure of their duty.

SOME OF THE ADVANTAGES AND POSSIBLE ERRORS OF THE RADIOGRAPH IN RENAL, URETERAL AND BLADDER SURGERY.

WILLIAM N. WISHARD, A.M., M.D.
INDIANAPOLIS.

The following cases are reported as illustrating some of the advantages and some of the possibilities of error in radiography as a means of diagnosis. Fortunately the errors do not properly relate to the reliability of *x-ray* photography so much as they do to a proper construction of the evidence presented. The cases require no special comment and are presented because of their interest. The radiographs were made at my request by Dr. A. M. Cole of this city, and I am indebted to his courtesy for the prints from which the illustrations are made.

CASE 1.—J. Me., aged 10, with the following history: The patient had suffered from bladder irritation and periodical attacks of severe bladder pain from the time he was 18 months old. At this time he was found in the yard, screaming with pain, which lasted for a day or two, which gradually subsided to come on again periodically as stated above. When he was brought to my office on Aug. 10, 1907, he was crying continually from the pain and constant desire to urinate. He had not slept for four or five nights. After obtaining the history no attempt at sounding was made, but he was placed as soon as possible

under the influence of ehloroform and a skia-graph taken. While still under the influence of the anesthetic a bloek tin sound was introduced into the bladder and revealed what seemed to be a rather large, rough stone. Suprapubie cystotomy was done for removal of the stone the following day, and the stone removed in fragments, as it crushed under the force of the stone forceps. After removal a steel pin was found form-

of other and larger stones, a radiograph was obtained, and in the foregoing illustration the stones are shown in about their normal size. Thirteen were counted in the photograph and through the air-dilating cystoscope, and the number verified by removal through a small median perineal opening which was made under local anesthesia.

CASE 3.—Mr. H., aged 62. I was called to see him on Dec. 12, 1906, by Dr. J. O. Wehrman of Indianapolis. The patient was suffering with an acute retention of urine, and repeated efforts at catheterization had been unsuccessful. I succeeded in emptying the bladder by the use of one of my flat-elbowed catheters, which is a modification of the ordinary Mereier, in that it is flattened so that its lateral diameter is greatest, and its flexibility thereby increased. Almost a quart of bloody urine was withdrawn, and it contained a considerable amount of phosphatic sand. For two or three weeks the systematic use of the catheter was accompanied by the passage of con-



Fig. 1.—Stone in the bladder with needle as nucleus. Removed through suprapubic opening.

ing the nucleus. His recovery was uneventful, except for a tendency to marked phosphaturia, which caused a deposit on the drainage tube and also about the wound, requiring the use of hydrochloric acid internally and a weak irrigation of hydrochloric acid in sterile water. This child was possibly the victim of a meddling nurse in infancy. He had been suffering almost continuously since he was 18 months old.

CASE 2.—Mr. J. S. of Shelbyville, Ind., had been suffering for two or three years with considerable bladder irritation, and on the day of his examination he said that for several weeks preceeding he had had an almost incessant desire to urinate. In brief, he complained of all the usual and characteristic symptoms of stone in the bladder, and, on introducing the searcher, stone was easily felt. The bladder was irrigated, and under local anesthesia an air-dilating cystoscope was introduced and a number of small stones were observed that looked as though they could be easily removed through a small perineal opening. To avoid error as to possible existence



Fig. 2.—Cluster of small stones in the male bladder. Removed through perineal incision under local anesthesia.

siderable soft disintegrated stone. The total amount of sand obtained in this way was approximately a dessertspoonful. At the end of three weeks the patient had a violent attack of ureteral colic, followed by the passage of a fragment of hard stone about the size of a grain of wheat. This piece of stone showed a distinct line of fracture and seemed to have been broken

off of another piece. More or less renal and ureteral irritation existed, particularly on the right side. In the attack of ureteral colic above referred to, pain had been most marked near the lower end of the right ureter. The natural inference was, in view of the quantity of soft stone and the small piece of hard stone that had passed, that probably there was more stone either within



Fig. 3.—“a” shows shadow of wire in ureter; “b” shows shadows suggesting ureteral stones before the above radiograph with wire in ureteral catheter showed true location of ureter.

the kidney or the ureter. A radiograph was made of each kidney and of the bladder, and particular effort made to show the lower end of the ureters. The first picture of the right kidney showed a distinct shadow near the upper end of the ureter which was thought to be an accumulation of soft stone and which was absent in another picture taken some two or three weeks later. The radiograph of the lower end of the ureters and bladder showed what seemed to be two or three small stones in the lower end of each ureter. I, therefore, introduced a cystoscope and passed a catheter up the ureter on each side and found both ureters perfectly permeable. Hoping to facilitate the escape of any particles of sand or stone, I also injected sterile water into the pelves of the kidneys and, gradually withdrawing the catheter, I also tried distending the ureters by injecting sterile water. The only result was to provoke some ureteral colic. I then reinserted the catheter on the right side and injected the pelvis of the kidney with sterile sweet

oil, and also injected the sterile oil into the ureter as the catheter was being withdrawn. The left ureter was then catheterized and the oil injected into the kidney and ureter on that side. It was hoped that the flushing of the kidneys and ureters in this way would facilitate the escape of any stone, but in this I was disappointed. At a subsequent sitting a few days later the same process was repeated with negative results. The radiograph having disclosed two or three small shadows parallel with the long diameter of, and apparently not far from the lower end of both the right and left ureter, the natural inference was that there might be intra-ureteral stones not felt by the catheter and possibly partially encysted. To determine this fact and to disclose the exact relation of the ureters to the shadows of supposed stone, a catheter was passed up the right ureter containing a small steel wire, and while the catheter and wire were in position another radiograph was taken. It will be observed by reference to the radiograph (Fig. 3) that the shadows “b” are quite a little distance from the ureter, which is indicated by the shadow on the wire marked “a.” The circular picture shown by the radiograph was a little confusing anatomically until the ureter was definitely

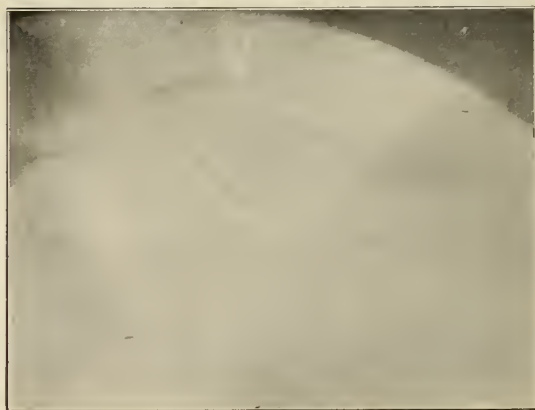


Fig. 4.—The arrow point shows shadow of supposed soft stone. This shadow was absent in a radiograph taken two weeks later. In the interval considerable soft stone was passed.

shown by the subsequent picture with the catheter containing the wire. Whether these confusing shadows, that seemed in the first place ureteral stones, are points of beginning ossification of the pelvic ligaments or calcareous degeneration of small glands or phleboliths would remain for the present a matter of speculation, but it was clinically a matter of great interest to have the question of possible surgical procedure eliminated by the information obtained by the radiograph. Figure 4 shows a radiograph taken in

the same case as Figure 3, except that it is intended to illustrate the conditions higher up. The arrow point in the upper part of Figure 4 indicates a small shadow shown in one of the earlier examinations and which a later radiograph failed to show. In the two weeks' interval between these pictures a large quantity of soft stone had passed, and the inference was that the shadow indicated in Figure 4 was an accumulation of soft stone which had been passed before the later radiograph was made. The shadow indicated by the arrow point in No. 4 is not shown in the latter picture.

ANATOMICAL BASIS FOR REFLEX MOVEMENTS.

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The room becomes too hot, we close the dampers. The bell rings, we go to dinner. Our whole lives are spent in activities the nature of which is

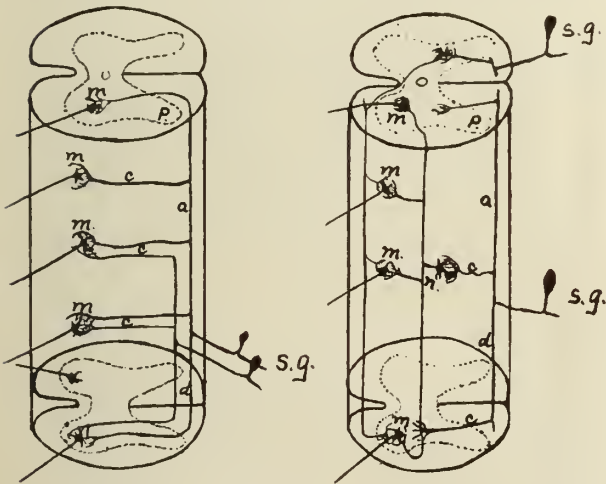


Figure 1.

Figure 2.

Figs. 1 and 2.—s. g., spinal ganglion; a, ascending and d, descending process of axone coming in from s. g.; c, collaterals; m, motor cells of anterior horn; p, posterior horn; n, neurone completing reflex arc (after Gehuchlen).

determined by an inflow of sensations. Some of these activities are clearly conscious and voluntary, as those mentioned above. Other sensations give rise to activities of which we may be unconscious, as, for instance, the flow of the secretions. Of still other acts we may be conscious, though they are involuntary or performed even against our will, as winking or coughing. Such involuntary acts, whether conscious or unconscious, resulting from conversion of a sensory into a motor impulse, are called reflex.

The reflex act is one of the simplest of nervous actions. Two neurons are necessary, the one, sensory, which transmits its impulse to the other, which is motor.

The anatomical conditions rendering reflex movements possible are indicated in the diagram (Fig. 1). In this figure the axones (cellulifugal processes of the neurone) are seen to arise from the spinal ganglion and enter the spinal cord, where they immediately branch to send some processes upward and others downward. These ascending and descending processes give off collaterals which are described by some authors as

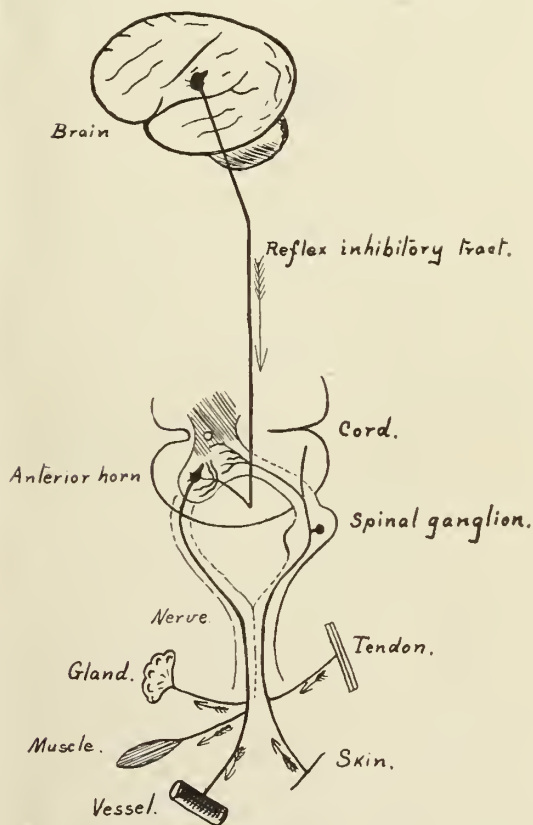


Fig. 3.—Diagram to illustrate the mechanism of a spinal reflex and its inhibition from above (after Mettler).

passing over directly to become associated with the dendrites of the motor cells lying in the anterior gray horn. According to other authors, the reflex arc is completed by the interposition of another neurone between the collaterals of the axones of the posterior horn and the dendrites of the motor cells of the anterior horn. This possible condition is illustrated in the diagram (Fig. 2). Which condition is the true one is a matter of immaterial dispute. Probably both are correct. But that there is this connection between the posterior horns bringing in sensory impulses, and the anterior horns in which lie

cells whose axones run outward carrying motor impulses, has been demonstrated by many investigators. The effect of this union of the sensory and motor roots is very like that of the shunt in an electric circuit.

A shunt, a conductor of relatively low resistance connecting two points on an electric circuit, establishes a shortened circuit through which a portion of the current will pass.

The anatomical connection between the posterior and anterior horns operates in the same way, i. e., a part of the sensory impulse is shunted, short circuited, across to the anterior horn and out over the motor nerve so quickly that the resulting motion is said to be reflected or reflex.

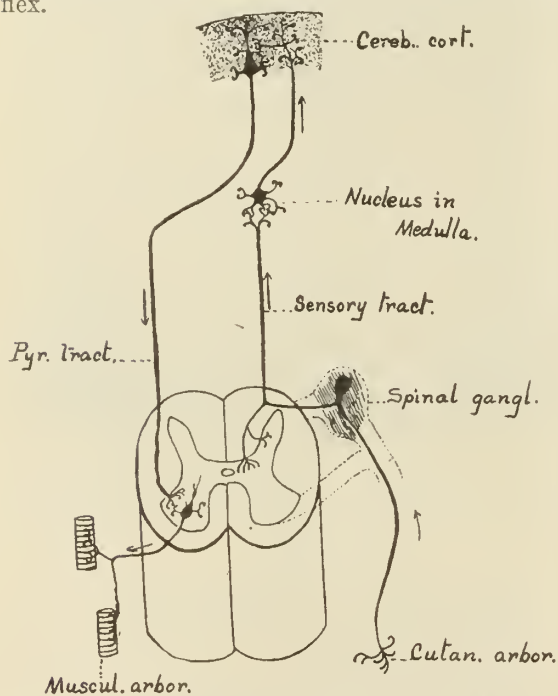


Fig. 4.—Cerebral or superior reflex arc (after Morat).

Morat considers that all areas of gray matter wherever found, including the cerebral cortex, are capable of anatomically reflecting impulses. It would follow, then, that we may have superposed reflex arcs, that the one we have been considering is the inferior arc, and that the superior lies in the cerebral cortex. Indeed we have the closed circuit here as in the inferior arc, as illustrated in Figure 4.¹

At the time of birth all movements are reflex and impulses play chiefly over the lower arc. The functions at this period of life are called vegetative, i. e., they are likened to the process of veg-

etable growth, as digestion, circulation, secretion and excretion, which are particularly concerned with the growth, waste and repair of the organism; and are opposed to certain higher animal functions, such as locomotion and cerebration.

As the child develops, a checking, retarding or inhibiting influence is added to the activities of the reflex arc. Children even at eight months of age may be so trained, may have their reflex inhibitory impulses so developed, that they may soil no more napkins. Just what the anatomical basis for these inhibitory impulses may be is not known with certainty, but a possible explanation of it is shown in Figure 3. Whether the inhibitory impulse is carried over the pyramidal tracts or by a separate group of fibers, is not known, but that impulses originating in the brain cortex may act on the cells of the anterior gray horn of the spinal cord, checking such reflex functions as defecation and micturition, etc., is a matter of common observation. We are all fa-

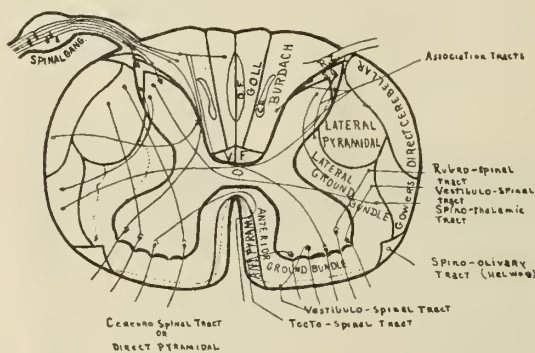


Figure 5.

miliar with the device of pressing on the upper lip to inhibit the act of sneezing, and the voluntary inhibition of the knee-jerk. In fact, so great is the possibility of an inhibitory impulse interfering with the knee reflex that devices to strengthen the reflex are resorted to. These, in all probability, merely interrupt an inhibitory impulse.

In Figures 1 and 2 the simplest anatomical condition essential to a reflex is illustrated. It is easy to understand how the impulse from a finger on a hot stove is carried up the sensory nerve and reflected through the low cervical cord to the motor roots of the brachial plexus and thus to the muscles of the arm. Such reflex acts necessitate a comparatively short passage through the cord. On the other hand, many reflexes are accomplished by the intervention of a connecting neuron of considerable length, as in the case of the reflex maintenance of equilibrium.

1. In explanation of this figure it should be stated that two neurones enter into the conduction of motor impulses from the cortex to the periphery, and at least two, more often three and even more neurones take part in the formation of the sensory pathway.

Let us study, for a few moments, the reflex paths by which equilibrium is maintained. In Figure 5, modified from Lenhossek, it will be noted that in the anterior and lateral ground bundles are a number of tracts from which cell processes pass over to cells of the anterior horn. Among these is the vestibulo-spinal tract, the fibers of which arise in Deiters' nucleus in the floor of the fourth ventricle and pass downward to end in arborizations about the cells of the anterior horns of the spinal cord, as shown in the illustration. Over this reflex path messages are streaming from the vestibular nerve and cerebellum to the motor roots of the cord conveying information of the position of the body and enabling the individual to maintain his equilibrium.

Next to the antero-median fissure (Fig. 5) will be noted the tecto-spinal tract, sometimes called the sulcomarginal bundle. This tract extends from the superior colliculi of the corpora quadrigemina down the spinal cord to end about the anterior horn cells. Inasmuch as the superior colliculi of the corpora quadrigemina is one of the terminal nuclear masses for the optic nerve, this tecto-spinal tract is evidently the shunt in a visual reflex arc. It is probable that it is due to the impulses conducted over this tract that a man suffering from tabes dorsalis is able to stand and walk if not blindfolded.

There are many reflex arcs, however, the anatomical basis of which is only conjectural. Take, for instance, the reflex act known as coughing. The sensory nerves involved are the laryngeal branches of the vagus, impulses over which reach the brain high up in the medulla. In the series of expiratory blasts constituting coughing the abdominal muscles chiefly are used. These muscles are innervated by the anterior primary divisions of the sixth to the twelfth thoracic nerves. Now, in response to the irritation in the throat, the abdominal muscles contract and the glottis closes. This closing of the glottis is as truly a reflex as the contraction of the abdominal muscles. If we are determined not to cough we may find the abdominal muscles giving a series of three or four strong contractions which, in spite of us, we may not be able to control or check immediately. If, however, we make no effort to check the coughing we note that the contraction of the glottis is released, permitting a blast of air to pass through it under pressure of the contracted abdomen. Now, in some way there must be a connection between the vagus and the lower thoracic nerves. What this connection is we do not know, but it is probably effected by the long

association tracts lying in the antero-lateral ground bundle.

In like manner we might discuss the act of vomiting, sneezing, winking, swallowing, respiration, sudation, secretion and excretion and many others, all of which are reflex. After studying movement after movement we are surprised to find how many of our acts are reflex. Even the impulses which reach the cerebral cortex are in many cases reflected through the superior arc appearing more or less modified in some act. The reflex through the superior arc may reverse the act of the reflex through the inferior arc. This is probably due to the fact that in the time necessary for the passage of an impulse through a reflex center, which is always relatively considerable, certain modifications of it take place, memories and possibly sensations over different afferent paths are brought to bear on it so that the motor impulse which is liberated is in a sense a judgment elaborated from the original sensory impulse.

The introduction of this psychic factor in the superior reflexes enables us to make a distinction between these activities and the so-called pure reflexes, but it should be understood that so far as the nervous mechanism is concerned, conscious reactions do not differ from pure reflexes. Though we voluntarily close the damper, our voluntary movement is under the control of a stream of sensations arriving from the muscles themselves and modifying the action of the motor neurone through which the movement is effected. All such movements as walking, dancing, skating, bicycle riding, automobile driving, singing, writing, etc., though at first voluntary and conscious, become involuntary and unconscious in proportion to the skill acquired in them. In learning all such movements the first thing is to establish proper reflexes and skill in performing them will be in proportion to thoroughness with which our reflexes are established.

SPINA BIFIDA.*

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FORT WAYNE, IND.

By the term spina bifida is meant a congenital deformity consisting of a defect in union of the lamina of one or more vertebræ, accompanied or not by malformation of the cord or its membranes, or both. The defect is usually a posterior median one, but it may be anterior or

* Read at the meeting of the Twelfth Councilor District Medical Society, Fort Wayne, Ind., Oct. 29, 1907.

lateral. De Forrest Willard¹ reports a case in which there was both an anterior and posterior protusion, and has collected four other cases of anterior spina bifida, in two of which the diagnosis of ovarian cyst was made. Accompanying the defects noted there is usually a superabundance of cerebrospinal fluid. Spina bifida occurs once in one thousand births, according to Wernitz.² The etiology is unknown. To say that it is due to the failure of the skin and medulla to separate³ is but another way of saying that it is due to an arrest of development. A hasty glance at the embryology and anatomy of the parts con-

the second or third lumbar vertebra. In spina bifida, however, the fusion of the superficial layer of the epiblast and the embryonic cord may continue, thus preventing the recession of the cord and causing it to extend to a lower level than normal. Sutton reports a case of sacral meningocele in which the cord extended to the tip of the sacrum. The fact that the neural canal and the enteric canal are, at a very early date, continuous, explains the frequent coexistence of spina bifida and imperforate pharynx, or imperforate rectum and other similar defects of the alimentary canal.

That developmental defects are often multiple we know; hence we are not surprised to learn that spina bifida is frequently complicated by club-foot, hare-lip, etc.

Varieties and Pathology.—The defect may involve but a single lamina or be coextensive with the spinal column (rachischisis-totalis). The varieties of spina bifida are determined by the stage at which development is arrested in the embryo, and this is determined by the anatomy of the parts.



Fig. 2.—Syringo-myelocele (after Sutton).

cerned will help to a more perfect understanding of the subject.

"The spinal cord and a large part of the brain are formed by the dorsal coalescence of the medullary folds."⁴ This fusion commences in the thoracic region and extends in both directions. This explains why spina bifida is relatively common in the cervical and lumbosacral regions and rare in the dorsal region. For a short time after the medullary folds have coalesced, the embryonic cord and superficial epiblast (skin) remain fused. Gradually these layers are separated by a growth of connective tissue between them, part of which connective tissue later becomes the spinal column.

Up to the third month of fetal life the spinal cord and spinal canal are of equal length, but, as the bones grow much faster than the cord, the latter recedes until at birth it extends only to



Fig. 3.—Meningocele with syringo-myelocele (after Sutton).

There is much confusion in the nomenclature and description of the varieties of spina bifida. Perhaps the most satisfactory classification is that given by Sutton in his work on "Tumors, Innocent and Malignant." It is his classification that I shall use in this paper:

1. Myelocele.
2. Syringo-myelocele.
3. Meningo-myelocele.
4. Meningocele.
5. Masked spina bifida (spina bifida occulta).

1. In myelocele the medullary folds fail to unite, and in the lumbar portion the central

1. Annals of Surgery, vol. xxxix, p. 612.

2. Keen's Surgery, vol. ii, p. 820, et seq.

3. This is the etiology given by Marchand and others.

4. Tumors, Innocent and Malignant, J. Bland Sutton.



Fig. 1.—(After Shattuck, from Sutton, colored for the author by Mr. R. W. Grafton). Open lumbar myelocoele. Illustrating article by Dr. Miles F. Porter.

caual opens on a shallow depression whose margins are continuous with the skin and whose floor is formed mainly of very vascular nerve tissue, bright red in color. In some cases this depression is covered by a translucent membrane. This latter variety might properly be termed closed or covered myelocele to distinguish it from the open variety, which is also known as the open myelo-meningocele of v. Recklinghausen.

Figure 1 (after Shattock from Sutton) shows the lumbar region of a fetus with a spina bifida of the variety open myelocele. Children with this deformity are usually stillborn, and, if born alive, live but a few days, because of the continual draining away of the cerebrospinal fluid in the open cases and early rupture with a like result in the closed cases.

2. *Syringo-myelocele*.—In this condition the medullary folds have united, but failed to separate from the epiblast (skin). The central canal is dilated, and careful dissection shows the nerve trunks running around the convexity of the cyst to make their exit at the intervertebral foramina. This variety of spina bifida is very rare and practically impossible to diagnose during life. Figure 2 (after Sutton) shows a syringo-myelocele in transverse section. Meningocele in combination with syringo-myelocele is not so rare. Figure 3 (after Sutton) shows a sagittal section of a case of this kind.

3. *Meningo-myelocele*.—In this variety of spina bifida the cord fails to separate from the surface epiblast, but is closed and becomes compressed against the posterior wall of the cyst, while the nerve cords stretch across the cyst to gain the intervertebral foramina. Figure 4 (after Sutton) is a diagram of a transverse section of this variety of spina bifida. This is regarded by some writers as the most frequent form of spina bifida.

4. *Meningocele*.—This is said by Sutton and others to be an infrequent form of spina bifida and consists of a protrusion of the membranes through a defect in the column. That such a protrusion may make its way from a canal without bone defect is believed by some writers. Certain it is that the sac of a meningocele often emerges through a very narrow orifice, and in some cases the communication between the cyst and the dural space may be entirely cut off. Virchow⁴ reported a case of this kind which occurred in Central Africa and was removed under the impression that it was a fatty tumor.

My own limited experience, covering three cases operated on, would lead me to believe that meningocele is one of the more common forms

of spina bifida. Two of the three cases were of this variety, one cervical and one lumbo-sacral, and one was a closed myelocele. Muscatello² also regards meningocele as the commonest form of spina bifida.

5. *Spina Bifida Occulta*.—In this condition the cord and membranes are normal, but the arches of one or more vertebræ are defective. There is no hernia of either the cord or membranes. An unusual growth of hair in the loins is not uncommon in all forms of spina bifida, but is particularly likely to be present in the occult variety. The association of perforating ulcer of the foot is so common with this form of spina bifida that one should always look for the deformity when cases of perforating ulcer present themselves. Krönlein, Recklinghausen and Kirrmissen⁵ report cases of perforating ulcer of the foot occurring in patients with spina bifida occulta.

Symptoms.—Many, perhaps the majority, of cases of spina bifida present no symptoms other than the deformity, in other cases a varying degree of paralysis, sensory or motor, or both, is present, dependent on the location and character of the defect. As above noted, other deformities are frequently associated, especially hydrocephalus, club-foot, hare-lip, cleft palate and imperforate anus. The bony cleft can not usually be felt owing to the size or tension of the tumor, or to the amount of fatty tissue, but may in some cases, especially in older patients, be shown by the x-ray. Ulceration of the skin covering the tumor is so frequent as to be of diagnostic importance.

Diagnosis.—The diagnosis of spina bifida in its broad sense is easy, but the diagnosis of the variety is usually difficult and often impossible until the tumor is opened. The congenital origin and the location of the tumor filled with fluid, with the change in tension on blowing, coughing, crying, etc., are sufficient for the diagnosis of spina bifida. In this connection it should not be forgotten that the communication between the sac and the cord may become obliterated, as in Virchow's case noted above, in which case there would be no increase in tension on coughing, sneezing, etc. Here also it may be noted that there is no relative proportion between the size of the cleft and the tumor. That is to say, that in a given case the cleft may be large and the tumor small and *vice versa*. The differential diagnosis between the different forms is quite as important as it is difficult. Pedunculation usually means meningocele, no matter

5. *Annals of Surgery*, vol. viii, p. 56.

what the location. The pedicle may, however, appear broad and, indeed, slightly marked from without, while on operation and separation of the sac from the skin and subcutaneous tissue the pedicle is found to be quite narrow. This was the condition presented in my third case. Most sacral tumors are meningoceles. Extensive paralyses and trophic disturbances indicate the presence of nerve tissue in the sac. Shadows seen by transillumination indicate the presence in the sac of nerve tissue, but the coverings of the sac may be so thick that they can not be seen though present. Shadows may also be cast by septa in sacs. Prompt bulging of the fontanels following pressure on the tumor indicate some form of myelocele. A dimple in the sac has the

Rupture of the sac with sudden evacuation of the fluid from the ventricles of the brain may prove quickly fatal. Urinary sepsis from paralysis of the bladder, infection of the meninges, and hydrocephalus are relatively common among the causes of death.

Treatment.—My chief object in presenting this paper is to assist in dispelling the all too prevalent opinion that children with spina bifida are doomed and that treatment is futile. The prevalence of this opinion is costing many lives yearly which intelligent surgery might save.

Treves, writing twenty-three years ago,⁶ speaking of the operative treatment of spina bifida, says: "The operations are, as far as surgical science at present goes, restricted to cases that present in a marked degree the elements necessary for spontaneous cure and to cases where the cure has so far advanced that the opening in the bones has become closed and the tumor gives trouble only by its bulk. If the sac contains cord elements the result will prove fatal."

As late as 1892 A. T. Cabot of Boston said⁷ that the facts existing at that time justified the statement that the conclusion arrived at by the committee of the Clinical Society of London, to the effect that injection into the sac offered the best prospect of cure, was that held by most surgeons at that time. Mayo Robson reports⁸ three cases treated by injection of Morton's fluid, two of which died of rapidly developed hydrocephalus within three months of the injection and the third died of shock. Keen, writing in 1895, says:⁹ "In the very large majority of cases practically no treatment other than a palliative one can be adopted."

Woolsey, in Keen's Surgery just published, says: "No operation should be done when these tumors have a thick covering of sound skin and are not enlarging rapidly." He advises the open operation in preference to injection or the use of the ligature, and says: "At present open operation is almost exclusively used."

The above quotations show that the treatment of spina bifida by injection and by the ligature has been relegated to oblivion, a fate which these uncertain and unsurgical measures deserved long before it was meted out to them. They also show but little faith in the open operation. On the other hand, the study of the literature shows that the trend is toward earlier and more frequent resort to open surgical operation. Mayo-

6. Int. Encycl. of Surgery, vol. iv, p. 900.

7. Annals of Surgery, vol. xvi, p. 121.

8. Annals of Surgery, vol. xxii, p. 82.

9. Dennis System of Surgery, vol. II, p. 793.



Fig. 4.—Diagram of transverse section of meningo-myelocele (after Sutton).

same significance. As indicated in an earlier part of the paper an exact diagnosis prior to an operation will be impossible in many cases.

Prognosis.—Generally speaking the prognosis is extremely unfavorable. Thirty of thirty-two cases observed in the St. Petersburg Foundlings' Home ended in death at the end of the first few months of life. Spontaneous cure is not unknown, but it is so very rare that it may be left out of the reckoning. Three cases of spontaneous recovery are reported in abstract in the *Annals of Surgery*, vol. xii, p. 448. Complicating deformities, such as imperforate anus or pharynx, often add to the gravity of the prognosis. Out of 649 deaths from spina bifida in England in 1882, 612 died within the first year.²

Robson, Zenenko, and others have reported cases of myelo-meningocele which recovered after operation, thus proving beyond question that Treves was in error when he said that operation would prove fatal in all cases in which the sac contains "cord elements."

Confining my search to the *Annals of Surgery*, I have found there reported thirty-nine cases of spina bifida operated by the open method. Of these, twenty-six cases were cured and thirteen

The danger of sepsis is practically within the surgeon's control, and it is less likely to occur without operation than with it. By clamping the neck of the sac or corking the opening into the spinal canal with the finger or a sponge dangerous loss of cerebrospinal fluid can be prevented.

Contraindications to Operation.—Rachischisis totalis is inoperable and myelocele is generally so considered, but I firmly believe that future experience will prove that operation may save many cases of this otherwise speedily fatal deformity, although from the nature of the conditions the mortality will always be high.

Hydrocephalus is said to contraindicate operation. It should be stated here, however, that early operation may prevent hydrocephalus, and



Fig. 5.—Photograph of author's third case before operation.

died. To these may be added my cases, three in number, two of which recovered and one died. This gives in all forty-two cases operated, with $66\frac{2}{3}$ per cent. of recoveries. Deducting three deaths which were in no way due to the operation, we have a mortality of $26\frac{4}{21}$ per cent.

Barring the rare cases in which spontaneous cure occurs, operation offers these patients their only hope of cure, and in those cases in which spontaneous cure is possible the operation entails less risk than the carrying of the deformity does.

Dangers of the Operation.—These are shock, sepsis and loss of cerebrospinal fluid.

Shock is to be feared only in those cases which are of such a nature as to threaten immediately the child's life if left to themselves. Hence to refuse to operate for fear of death from shock is to sentence them to certain death rather than give them their only chance of recovery by the performance of an operation which may at the most shorten their lives by a few days or weeks.



Fig. 6.—Photograph showing cicatrix after operation in author's third case.

I venture the prediction, therefore, that it will cure some cases if done early. Given a patient with spina bifida, born without hydrocephalus, and developing this disease later, I would advise operation. Personally I would not refuse to operate a patient with spina bifida born with hydrocephalus, for in so doing one would stand to lose nothing that is worth keeping, and might be rewarded by the recovery of the patient. It goes without saying that no operation should be

done for the cure of a spina bifida in the presence of an imperforate pharynx or rectum.

Contrary to the opinion of some surgeons, paralysis is an indication for, rather than against operation. Lebrun² and others have reported cases in which the paralysis was improved or cured by operation. Improvement or cure of paralytic symptoms may be expected to follow operation in those cases in which these symptoms are due to pressure, but, of course, no such result can be obtained if the paralysis be due to a fetal defect. When the tumor is so small and so situated as to give rise to no inconvenience and has a firm, well-nourished covering, operation is unnecessary.

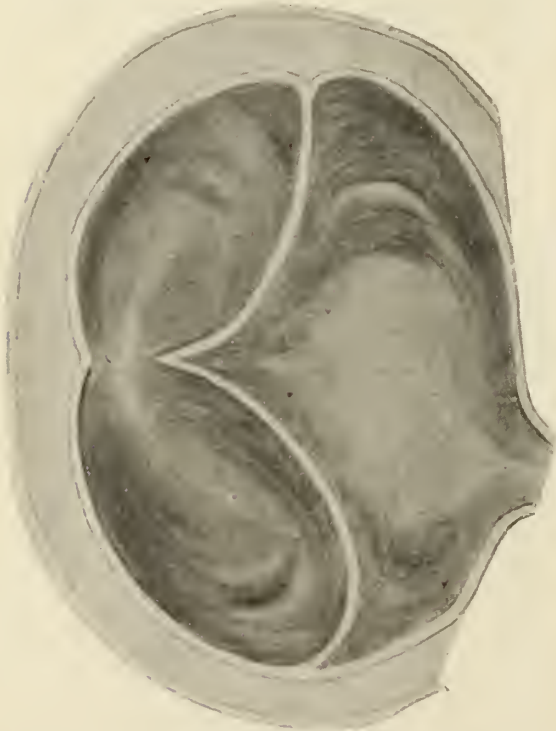


Fig. 7.—Semi-schematic drawing representing sagittal section of tumor removed from Case 3. The posterior cyst is bilocular, while the anterior cyst is unilocular and communicates with the spinal canal. No communication between the posterior and anterior cysts.

Time of Operation.—Given a tumor with thick, well-nourished coverings, not increasing in size and accompanied by no symptoms, operation had better be deferred until the child is 6 months old or a year old. But cases which are operated to improve symptoms or save life can not be operated too early.

Technic.—Infiltration anesthesia may be better in some cases, but in the majority ether is the anesthetic of choice. Scopolamin, morphin and cocain for the production of anesthesia are, in my judgment, unwarranted. Asepsis, avoidance of loss of cerebrospinal fluid, avoidance of injury to cord elements and avoidance of shock

are of prime importance. Hemorrhage is not likely to be profuse, but unusual precautions should be taken to guard against the loss of blood because of the extreme susceptibility of young babes, such as most of these patients are, to hemorrhage. Asepsis of the operating field may be secured in any of the well-known ways, but it should not be forgotten that a child's skin is tender and that too vigorous efforts in this direction may do more harm than good. Ulcerated areas should be cleansed with special care, covered during the operation, and excised if feasible. The skin covering the tumor is redundant so that excision of a portion of it is necessary; hence the excision of the ulcer-bearing area is feasible in all cases except in those in which it is too great in extent and those in which it involves skin inseparable from the cord elements. Separation of the sac from the skin should be done before the sac is opened. Clamping the sac when this is possible is the best means of preventing the loss of cerebrospinal fluid. With care this may be done without danger, even though the sac contains cord elements. Having the patient lie with the head low and the hips elevated is a wise precaution against serious loss of cerebrospinal fluid. It should be remembered that nerve elements, when present in the sac, usually occupy in the main a midline position in or against the posterior wall. Therefore, it is best to incise the skin laterally, open the sac in a clear spot on the side and, after the escape of the fluid, to examine carefully to determine whether any nerve tissue of importance is present, and, if so, its location. Lumbar and sacral spina bifida usually contain no nerves of great importance; hence in most of these cases the sac may be excised. In case the sac contains important nerve structures they should be separated from the sac if this can be done without harm, and, if not, that part of the sac adherent to the nerve structures should be returned to the spinal canal. In myelocoles of the covered variety and in large syringo-myelocoles the transparent dorsal part of the sac may be excised without injury to important nerve tissue. If the cauda is cut, the ends should be accurately sutured. If the sac is amputated *in toto* the safest way of closure is the ligature; if a part only is removed, it should be closed by suture. Whether ligature or suture is used, the material should be absorbable and the closure should be water tight.

Many methods have been suggested to restore the bony canal, but a firm covering to prevent a return of the hernia can be made of flaps made from the connective tissue, muscles and skin:

hence osteoplastic operations are unnecessary and unwarranted. It is better, perhaps, that the suture lines be so arranged as not to directly overlie each other, but it is doubtful if this precaution is of serious importance. Buried absorbable sutures are always to be used for the closure of the sac and the coaptation of the muscle and connective tissue flaps. Such a suture is preferable for the closure of the skin, but, owing to the irregularity of the wound, it will in some instances be wiser to use a through-and-through suture, in which case there can be no objection to the use of horse hair, although catgut (iodized) is, in my opinion, quite as safe, and by using it one has not to subject the child to the pain and fright necessitated by removal of stitches. Drainage is to be avoided. An adequate dry dressing, not too bunglesome, should be applied and left undisturbed for a week unless necessity requires its removal within that time. In lumbar and sacral cases in young patients the dressings must be protected from the discharges from the bowels and bladder by the use of rubber dam, protective or adhesive plaster, coupled with vigilance on the part of the nurse. To secure further safety along this line, no diaper is pinned, as usual, about the child, but instead the child is laid on a pad or folded diaper, and these are removed as soon as they are soiled.

A report of three cases of spina bifida operated by me are appended. I regret that the records of the first two cases are as incomplete as they are.

CASE 1.—Child, 6 weeks old. Healthy and well formed, except for a tumor the size of a Tangerine orange in the mid-cervical region. Tumor elastic and fluctuating, coverings thick, slight increase in tension when child cried. The tumor was circumscribed by an oval incision extending down to the sac. This being found clear the neck of the sac was transfixed, tied and excised. The skin flaps were closed with buried sutures. At the end of the week the wound was healed and the child went home, apparently cured. This babe was operated at the St. Joseph Hospital about five years ago and was heard from a few months later, when it was in perfect health.

CASE 2.—Referred by Dr. Carl Schilling. Small child, 48 hours old. Second child of healthy parents. Family history good, so far as attending physician knew, but no special inquiry was made. In the sacral region was an elongated, flattened tumor containing fluid, about two inches wide and three inches long, covered

with a semi-transparent membrane. There was marked increase in tension when child cried. Immediate operation was advised and accepted by the parents. The child was taken to the Lutheran Hospital for the operation, after which it was taken home, where it was cared for by Dr. Schilling, to whom I am indebted for the post-operative history of the case. Ether anesthesia. Through an opening in the side of the thin sac a finger was thrust into the opening in the canal, effectually preventing loss of cerebrospinal fluid. The transparent cover of the tumor was excised. The skin was undermined sufficiently to allow of approximation of the edges by sliding. Flaps were made of either side of the floor of the depression, the free margin of each flap corresponding to the outer rim of the depression, the hinge being near the center. These flaps were turned toward the center and their margins stitched, thus closing the spinal canal, then the skin flaps were slid over and stitched. The child recovered from the operation without severe shock, but died seventy-two hours later in convulsions, due to rapidly developing hydrocephalus.

CASE 3.—R. E. Female, aged 7 months. Was brought to me by Dr. Wilking of Roanoke, Ind., to whom I am indebted for the very complete history of the case.

Family history.—Father, who is 38 years of age, had a fainting spell, followed by extensor paralysis of the third toe, five years ago. Three years ago (1904) had a similar attack, followed by complete extensor paralysis of the foot and anesthesia of the leg and foot, which condition is still present. He was unable to walk until he was 4 years old, because of "spinal trouble." Specific infection denied.

The mother of the child lost one aunt from consumption. A brother of her parental grandfather had several children who had rickets and were feeble minded. She has been having tuberculosis since January. Has three children, aged 11, 8 and 4 years, respectively, in good health. Had a miscarriage at the seventh month of an hermaphrodite which had a tumor in the back, but which tumor was said by grandmother not to be in the midline. The attendant at this labor says there was an "enormous amount of amniotic fluid, possibly six or eight gallons." One child died when 6 months old with a lumbo-sacral spina bifida which had been leaking for two months.

The patient was born with a lumbo-sacral tumor three by four inches in diameter. A few weeks later a slight paralysis of the anal sphincter

ter was noticed, also a slight tendency to talipes equinus. On examination I found a well-nourished, bright child with a lumbo-sacral tumor measuring five by seven inches in diameter. The tumor was covered by healthy skin, was elastic, fluctuated and expanded when the child cried. There was slight paralysis of the anal sphincter. No other defects. A diagnosis of spina bifida of the variety meningocele was made and operation advised. After due preparation the operation was done at Hope Hospital.

Technic.—The tumor was circumscribed with an incision down to the sac, which was separated from the surrounding tissues down to the defect in the spine, which was found to be about two inches long and one-half inch wide. The neck of the sac was carefully clamped, the sac opened and examined. No important nerve structure being found, the sac with its skin covering was excised, the sac closed by catgut sutures, the stump dropped and covered with flaps taken from the soft structures on either side of the spinal defect, and over those the skin was sutured. A dry dressing was applied, the lower portion being protected from discharges from the bowel and bladder by adhesive plaster. There was no leakage of cerebrospinal fluid. The wound was dressed first one week after the operation and found healed, save for one or two small areas on the surface where the coaptation was not perfect. Recovery was uneventful, save for a mild attack of bronchopneumonia, which commenced on the first day and lasted until the sixth day. The child left the hospital 40 days after the operation and remains in perfect health. There is still some anal paresis. Figures 5 and 6 are made from photographs of the child before and after operation. Figure 7 is a drawing representing a sagittal section of the tumor removed. There are two distinct cysts, the posterior is bilocular, the two locules connecting by a narrow opening, while the anterior communicated with the spinal canal.

THE WORK OF THE INDIANA STATE BOARD OF HEALTH.

J. N. HURTY, M.D.

Secretary of the Indiana State Board of Health.
INDIANAPOLIS.

Before discussing the work of the State Board of Health it is well for us to consider the morbidity and mortality in Indiana for the year.

During the twelve months ending Nov. 30, 1907, there was less sickness and death than in the corresponding preceding period.

Smallpox.—Was reported present somewhere every month in the year. The deaths numbered 9, and for preceding period 6. The number of cases reported is only a partial gauge of the prevalence of smallpox, because usually only the absolutely certain ones are reported. The hundreds of mild cases, diagnosed as "eruption caused by buckwheat cakes," as "blood impurity," as "Cnban itch," etc., escape being reported. Also the thousands of cases which are diagnosed as grip or not diagnosed at all. Seven years of smallpox in Indiana has demonstrated, as elsewhere, that quarantine and isolation are useless for the purpose of preventing the spread of the malady. The mild unrecognized cases spread the infection, and quarantine is never applied to them. The remark made by Prof. John Fisk, "It takes a thousand years to raise the human family a single notch," is fully sustained by the slowness with which the people take hold of vaccination. Here is a prophylaxis, tried, well proven, harmless, and yet a so-called practical people will not generally adopt it.

Diphtheria.—The deaths from diphtheria numbered 353, as against 402 in the preceding year, a decrease of 49, or 12.1 per cent. Compared with 1900, the first year of the collection of accurate mortality records, when the diphtheria deaths numbered 745, the decrease is 343, or 46 per cent. Compared with the average mortality for the last eight years (463) a decrease of 23.7 per cent. appears. Despite the marked decrease in mortality, there is no evidence to show a decrease in morbidity. If the sickness rate of diphtheria has not decreased, then it seems very probable that sanitation has not been a factor in the causing of the decrease in death rate, and, therefore, we conclude that the more general use of antitoxin (the application of eure) has brought about the improvement. Doubtless the use of antitoxin as a prophylactic has to some degree decreased diphtheria morbidity, but the effect must be very small, for diligent inquiry does not warrant the conclusion that immunizing is practiced to any appreciable extent. It grows plainer every year that diphtheria infection is generally spread by carriers who have not the slightest idea they are infected. In an epidemic in Plainfield, one hundred and twenty cultures were taken from unsuspected persons, and forty-four were positive. Cultures show that diphtheria prevails in adults more extensively than has been supposed.

Scarlet Fever.—We record 97 deaths from scarlet fever, against 101 in the preceding twelve months. The mortality from this malady is decreasing, for the average annual number of

deaths for the last eight years is 142. By this comparison the decrease is 31.6 per cent. This decrease is 7.9 per cent. more than the diphtheria decrease, and, in the absence of an antitoxin, must be attributed to more careful and successful treatment and perhaps to an extension of toleration, for there are no facts to suggest less prevalence. Epidemics of mild scarlet fever are not rare and, as with diphtheria, the infection is spread mostly by mild unrecognized cases.

Typhoid Fever.—The typhoid deaths numbered 858, as against 913 for the preceding period. This is a decrease of 55, or 6 per cent. The average annual deaths for eight years is 1,100, and by this comparison the decrease is 242, or 22 per cent. As typhoid fever is like sin, a disgrace to any community, the state is to be especially congratulated on account of the decline in deaths, but, as with diphtheria and scarlet fever, there is probably no decrease in prevalence. Mild cases in large numbers are undoubtedly common, and not even suspected. On account of the existence of so many blind carriers of typhoid infection, the prevalence of the malady will certainly remain undiminished until all human sewage, of all human beings, is sanitariously disposed of, all of the time.

Diarrheal Diseases.—The mortality from diarrheal diseases in children under 5 years of age and their prevalence is a fair gauge of the sanitary condition of a state. There were 1,823 deaths from these causes in 1906, and in 1907 there were 1,679, a decrease of 144, or 7.9 per cent. Comparison with the annual average, 1,740, deaths for the last eight years, shows for the last year a decrease of 65, or 3.5 per cent. Inquiry indicates a slight decrease in prevalence of diarrheal diseases.

Pneumonia.—The pneumonia death figures are 3,392 for 1906 and 3,483 for 1907, an increase of 96, or 2.5 per cent. The average of deaths annually for the last eight years is 3,419, and, compared with this figure, the last year shows an increase of 69, or 3 per cent. The increase in deaths from this disease in Chicago and other large cities is much greater than for this state. Over one-fifth of all pneumonia deaths, 746 in a total of 3,419, are of infants under 1 year of age. The age period of 5 to 30 is comparatively low in pneumonia deaths, the number almost doubling for the 30 to 60 period and almost doubling again for the 60 to 100 period.

Tuberculosis leads as a cause of death, 4,297 deaths occurring from it in 1907. This is a decrease from 4,456 in the preceding year of 159, or 3.5 per cent. The female tuberculosis deaths

always exceed the male deaths in Indiana, which is contrary to the conditions in large cities. The following table shows the terrible havoc wrought in 1906 in Indiana. A like table can not be compiled at this time for 1907, the data not being at hand:

Total consumption deaths.....	4,456
Males	1,675
Females	2,771
Mothers, age 18 to 40, prime of life.....	917
Fathers, age 18 to 40, prime of life.....	255
Orphans under 12 years.....	2,353
Homes invaded	3,283
Cost to the people, not less than....	\$10,000,000

Of the total consumption deaths this year 3,404 in 4,456, or 76 per cent., are in the age period 15 to 55 years. This is the working period. The question is always pertinent, How much longer will those who control our political affairs refuse to take cognizance of the awful preventable loss to the people from tuberculosis? Murders, suicides and accidental deaths show a decrease, as appears in the following tables:

	1907.	1906.
Murders	93	112
Suicides	321	343
Accidents	1,668	1,797

WORK OF THE STATE BOARD OF HEALTH.

The first step in sanitary work is the collection, tabulation and analysis of the vital statistics. This is done each month, and the sanitary lesson deduced and immediately practically applied. The statistics show what diseases exist and where, and this makes it possible to put forth intelligent efforts against them. Better and better cooperation of the people is given each year, and when it is finally generally secured the preventable diseases will be greatly reduced.

The State Board prints and distributes annually 10,000 circulars on the prevention and sanitary management of the following diseases: tuberculosis, diphtheria, scarlet fever, typhoid fever, diarrheal diseases, measles and the sexual plagues. These circulars are used to teach from in many schools, and frequently the managers of farmers' institutes apply for them for distribution among farmers. The direct applications from the people for these health circulars number several thousand annually. Of the 20,000 and more letters received each year, over 5,000 are from the common people asking for sanitary instruction and advice. The outgoing mail of the board averages over 200 pieces daily, and the individual calls to consult on sanitary subjects average six per day. The secretary, as executive officer of the board, directs all departments, analyzes the statistics, attends to all but the routine correspondence, and makes personal

visits and sanitary inspections in all parts of the state. In the past year he made 66 such visits and inspections, and also gave twenty-three public lectures to various societies on public health subjects.

LABORATORY OF HYGIENE.

In the Hygiene Laboratory the board does without fee all kinds of bacteriological and pathological work in the interests of the health of the people. In the year just passed 5,420 pathological specimens were examined and reported upon. Sputum, blood, diphtheria cultures, cancers, tumors, urine, feces, pathological fluids, etc., are some of the substances which are microscopically examined. This work is to give early aid in diagnosis of disease and thus to make cure more likely and also to aid in disease prevention. The early and certain diagnosis of typhoid fever, diphtheria, tuberculosis and other diseases is obviously of the greatest importance to the state as well as to the infected individual and his immediate neighborhood. The sooner the character of a disease is determined the sooner proper methods of cure and prevention come.

The Hygiene Laboratory has been called "The Life Saving Station," for its work is truly the saving of life.

PURE FOODS AND DRUGS.

The enforcement of the pure food and drug law falls upon the State Board of Health. There are five chemists, five inspectors, two stenographers and one janitor employed in the chemical laboratory and in inspection work. In the past year 4,098 analyses were made. The inspection of foods and drugs and sanitary inspection of slaughter houses, butcher shops, groceries, drug stores, dairies, milk depots, etc., numbered 3,061. The percentage of adulterations of foods, which was 42.3 in 1906, fell to 16.3 in 1907. This improvement is attributed to inspections and prosecutions by the State Board on account of adulterations. Wide publicity concerning the results of the board's anti-adulteration work has been given by the public press, and this has been a great help in suppressing adulteration. The milk inspection and analysis in 1906 showed 20.1 per cent. of all milk samples collected to be low standard. In 1907 this per cent. fell to 9.7. There were 2,076 drug samples analyzed during the year and the percentage of adulteration was 62.5. In 1906 the total number examined was 1,559, with 62.5 per cent. adulterated. It appears therefore from these figures that adulteration of drugs has not decreased but, instead, has

increased. We think this is due to the fact that, yielding to precedent and advice, very few suits have been filed against druggists, prosecutions, except in flagrant instances, being suspended and warnings given. It seems that warnings are not sufficient and the board will promptly prosecute in the future, and we feel certain the report will show a decrease in drug adulteration next year. The grocer may excuse the sale of adulterated goods on the plea that customers demand cheap foods, but the druggist has no such excuse, for certainly no person wants cheap drugs. It is fortunate for the people that the state as well as the federal law compels the printing on the label of every package containing alcohol, morphin, opium, cocain, heroin, chloroform, chloral hydrate and acetanilid a statement of the quantity of such ingredients present, will make clear to the purchaser what he is buying and will tend to suppress the manufacture and sale of a large number of worthless preparations.

THE NEW LAWS CONCERNING PUBLIC HEALTH.

The Sixty-fifth General Assembly passed five important laws concerning the public health. They were the registration law, the free anti-toxin law, the pure food law, the sterilization of degenerates law and the state tuberculosis hospital law.

The registration law covers the first and most important step in public health work. It requires that all births, deaths, contagious diseases and marriages shall be reported upon blank forms furnished by the State Board of Health, and that the same shall be promptly recorded in local record books and afterward forwarded and preserved in fireproof vaults in the state capitol building.

It is impossible to emphasize too emphatically the importance of correct vital statistics. Birth and death certificates are in daily demand in the courts to prove date and cause of death, place of burial, age, sex, color, etc. They are also constantly needed to prove date and place of birth, parentage, legitimacy, etc., to establish right to property inheritance, right to pension and right to insurance. Mothers are particularly interested in seeing to it that the birth of their infants are properly and correctly reported and recorded. It is the unexpected that happens, and those who least expect have to prove legitimacy, date and place of birth are frequently the very ones who find it necessary to do it. Important as vital statistics are for the individual, they are of still greater importance in public health work. Sta-

tistics of death and contagious diseases tell the health authorities the whereabouts of the enemy and make intelligent combat possible.

The free antitoxin law compels counties, cities and towns to supply diphtheria antitoxin free to the poor. The physician fills out a blank furnished by the State Board of Health telling how much antitoxin he needs, giving the name, age and sex and address of the patient and testifying to the belief that the patients are too poor to pay for the remedy. This properly-filled-out blank is a valid claim upon the county, city or town, as may be, and is current with any dealer in antitoxin. This law went into effect April 10, 1907, and since that date over 200 poor children have had the benefit of this marvelous remedy.

The pure food and drug law has been fully discussed, but a little history of the same will interest everyone. The first pure food law was presented by the State Board of Health in 1897 and was promptly rejected by the legislature. It was again presented in 1899 and passed, but no money and no laboratory were provided for its enforcement and it was a dead letter. Money and power for enforcement were asked from the legislature of 1901 and 1903, but the bill was promptly kicked out. The legislature of 1905 provided for the enforcement in a feeble way and the State Board did the best it could with the weak law. In 1907 there was an overwhelming demand from the people, and the Assembly of that year passed an excellent pure food and drug law and voted \$15,000 for its enforcement.

The report for 1907 when printed will fully record the work done, and the people will then know if they want it continued.

The passage of the sterilization of degenerates law by the Assembly of 1907 places Indiana in the lead of all states and all counties in the practical application of the scientific and only practical method of eliminating degenerates. The method is to legally sterilize confirmed criminals, idiots, rapists and imbeciles. We have heretofore preserved and by care have increased the duration of life of these degenerates and permitted them to procreate. To continue such a course means that finally the unfit will predominate and our race and nation be destroyed. The simple, harmless, painless, dangerless operation of vasectomy accomplishes sterilization without mutilation and without humiliation. The sterilized degenerate is improved in health and disposition, and in the experience at the Indiana Reformatory at Jeffersonville over 250 out of 300 have voluntarily submitted.

WHAT THE AMERICAN MEDICAL ASSOCIATION STANDS FOR.

The objects of the American Medical Association and its activities are stated by G. H. Simmons, in an address before the Kentucky State Medical Association, October 15-17 (*Journal American Medical Association*, November 23). Two of its objects, however, are more specially treated, viz.: Medical education and medical legislation. He gives a history of what has been done in the past, showing how from the first, advancement in medical education and medical requirements has been a prominent object of the organization, and how the apparently fruitless early efforts are in great part at least to be credited with the comparatively great results of recent years. At present the preliminary educational requirements are among the most important matters under consideration and the advertised statements of medical colleges are no longer accepted implicitly, but careful inspection is made by the Council on Medical Education, with the result that it has on record full data as to the equipment as well as the alleged requirements of the various institutions. Educational statistics are also collected regarding other parts of the world, complete lists of graduates and licentiates in this country are kept, and there is mutual co-operation between the council and the state examining boards in this matter. Directly related to the educational work is that of medical legislation, and there has been established by the association a central bureau to work in co-operation with state committees to secure proper medical laws throughout the country. Medical legislation is not for physicians only, but for the public, and what is best for all concerned should be carefully considered.

The various points which must be considered are being taken up by the Committee on Medical Legislation through this bureau, and the result will be, it is hoped, a system that will be equitable and fair, based on just principles and which shall possess some of the features of permanency. The American Medical Directory and the reasons for its production are also discussed, and the important work of the Council on Pharmacy and Chemistry is duly noticed. Dr. Simmons appeals to the Kentucky State Medical Association to co-operate by refusing to use proprietary remedies that have not been passed on by the Council. Other subjects noted are the recommendation that a board of public instruction on medical subjects be instituted, Dr. McCormack's work, the postgraduate work in the county societies, and the establishment of a postgraduate course as a part of the organization work, and, finally, the value of organization in the medical profession under one common head with the facilities it affords of advancement in all the lines above noticed. The association, Dr. Simmons says, stands for higher standards in medicine, uniform and just medical laws, honesty and integrity on the part of all connected with the profession and those who supply physicians with medicinal agents, for scientific, national and local sanitation, and, in short, for honesty and fairness in everything that relates to the health and physical welfare of the people. And, especially it stands for the individual doctor, to help him not only to become a better physician, but to protect and promote his social, scientific, moral and material interests, so that he can give better service to those who depend on him, and become a scientific and moral leader in every community.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 219 W. Wayne St., Fort Wayne, Ind.

JANUARY 15, 1908.

EDITORIALS

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

For two or three years the question of establishing a journal for the Indiana State Medical Association, to take the place of the bound "Transactions," has been more or less discussed by our members. At the 1906 meeting the House of Delegates referred the matter to the Council for consideration, but it was not until the meeting of 1907 that the Council, in carrying out the instructions of the House of Delegates, appointed a committee to determine the feasibility of establishing a journal and the wishes of the various county societies of the state as to carrying out the project.

The committee reported that with the money annually spent directly and indirectly in getting out the bound "Transactions" and making the usual Association announcements, added to the income which could probably be secured from advertising, it would be possible to publish a creditable monthly journal, and that sixty-one county societies (a large majority) had voted in favor of the establishment of a journal. Accordingly the Council, at a regular meeting held at Indianapolis on Oct. 15, 1907, voted to begin the publication of a monthly journal with the first of the year, and decided upon such policies and arrangements as seemed warranted in order to successfully carry out the project. This first number of *THE JOURNAL* of the Indiana State Medical Association is the result of that action and is offered as an evidence of what the members of the Association may expect from those upon whose shoulders falls the editorial and managerial work.

It will be our aim to publish as large and as good a journal as the Association's finances and our capabilities will permit. It is our purpose to give the members a journal which will serve all the purposes of any general medical periodical and in addition be the official organ of the Asso-

ciation. To this end we shall have, in addition to all announcements of the Association and a report of the annual meeting, departments devoted to original articles, editorials, news notes and comments, society proceedings, abstracts from current medical literature, and book reviews. We shall try to keep our members informed concerning medical affairs in the state, including the work of the Board of Health, the Board of Medical Registration and Examination, and such legislation as is of interest to the medical profession of Indiana.

The advertising pages will at all times be free from nostrum advertisements, as the advertisement of no medical preparation will be accepted unless the preparation is a U. S. P. or N. F. preparation or has been approved by the Council on Pharmacy and Chemistry of the American Medical Association, and any firm or individual will be refused advertising space if we can satisfy ourselves that such firm or individual is making a practice of defrauding patrons in any way. In other words, we shall adopt the policy that it is better for us to publish a journal without any advertising whatsoever than to publish a journal containing advertising for the publication of which we would feel that we owed our members an apology.

An endeavor will be made by the editors to make *THE JOURNAL* a truly representative organ of the medical profession of Indiana, and to that end the encouragement and support of every doctor in the state is solicited. As the chief function of *THE JOURNAL* is to further the interests of the Indiana State Medical Association, no little effort will be put forth to aid the medical organization movement, which in essence means the building up of the county medical societies. The aim of the editors will be to make *THE JOURNAL* a valuable assistant to the officers of county societies in increasing membership and interest in their respective organizations.

The editorial policy will be to recognize and approve the things which make for a better medical profession, and to disapprove and censure those things which lower the moral, professional or scientific standard of medical practice.

Indiana has long held an enviable record for progressiveness in medicine, and the establishment of a journal to represent the interests of the entire profession of the state is but another step in the line of progress. To make *THE JOURNAL* all that it should be in order to earn the support and encouragement of a progressive profession is the aim and hope of the editors.

THE COUNTY MEDICAL SOCIETY.

Under the present plan of organization of the American Medical Association, the largest and most representative organization of medical men in the world, the county society is made the fundamental unit upon which the structure is built. And of perhaps even greater importance is the relation which the county society bears to the state association. Hence the obvious necessity of making this primary factor a powerful instrument whose every stroke shall make for the good, not only of its individual members, but also of those bodies of which it has the privilege of serving as the foundation stone. How this can be best accomplished is one of the vital questions the solution of which is now being attempted by some of the ablest and most progressive men of our profession.

It has become a well established fact that the busiest practitioner is, generally speaking, the most faithful and enthusiastic attendant upon his county society meetings. Though his time is worth far more than that of the mediocre man, yet it is freely and gladly given for the upbuilding of his local society; to him it is a privilege to belong to such a body. Though yet in a somewhat embryonic state, the reports from those who have already instituted it would indicate that the plan of a postgraduate system of study as a program to be followed in the county society, pursuant to the suggestion of the Committee on Organization of the American Medical Association, is one of the excellent ways of increasing the usefulness of the society.

That a capable secretary is highly essential to the success of the county society is also self-evident; such a one as would enter heartily into all records and details of the work done, would keep in close touch with the members, and furnish a report of the proceedings of his society for publication. On the other hand, no one factor can contribute so much to the life of a state journal as the county society and its secretary. Indeed, so firmly do we believe that the success of this journal depends primarily upon the support of each and every county society within our state that our initial appeal is to the county secretary to furnish us all the information available concerning the affairs of his particular medical society. Not only records of society proceedings and papers read, but also all local news of interest, matter relating to medical legislation, higher medical education, organization, suppression of quackery and the nostrum evil, sanitation, vital

statistics, as well as personal news; all these are of the highest importance in promoting interest in the state organization and hence the organ of that body. We earnestly solicit the aid of every county secretary within our state in making *THE JOURNAL* of the Indiana State Medical Association the best of its kind in the country, an organ that shall be representative of the high rank that Indiana has earned in matters educational.

A WORD TO OUR MEMBERS ABOUT THE JOURNAL'S ADVERTISERS.

The success of any periodical depends essentially upon its quality, for without quality it cannot secure subscribers and readers, and without subscribers and readers it cannot secure patronage from those firms who look for returns from the readers who see the advertising. *THE JOURNAL* has been established for the purpose of giving the members of the Indiana State Medical Association an organ which they can call their own and in which every member may feel a sense of personal interest, but, unlike many medical journals, particularly of the privately owned character, its policy will be to furnish not only quality in its reading pages but quality in the advertising pages as well.

In carrying out this latter policy the rule has been adopted that the advertisement of no medical preparation will be accepted for publication in *THE JOURNAL* unless it is a U. S. P. or N. F. preparation or has been approved by the Council on Pharmacy and Chemistry of the American Medical Association, and no advertisement of objectionable character of any kind whatsoever is to appear in *THE JOURNAL*. The adherence to this policy has already resulted in the refusal of over \$2,000 worth of advertising, but we propose to keep the advertising pages clean and above criticism even if we have to publish a journal without any advertising whatever.

But we have been successful in securing a modest amount of advertising patronage, and the fact that the contracts accepted comply with our rigid requirements is sufficient to give every one of our advertisers an endorsement. We therefore respectfully ask our members to favor *THE JOURNAL*'s advertisers whenever possible. Remember that every dollar received from advertising enables us to publish a larger and better journal, and it is to your interest to support those firms who advertise in your journal for the reason that all our advertisers are worthy of patron-

age and they should be shown preference because they are aiding us, with the money paid for advertising, in publishing a larger and better journal than otherwise would be possible.

If you are about to purchase or prescribe any pharmaceutical specialty, instrument, appliance or office equipment, see if it is advertised in *THE JOURNAL*. If it is not advertised in *THE JOURNAL* find out why it is not. Let those you are dealing with know that we have a medical journal which is owned, published and controlled by the medical profession of Indiana and that *THE JOURNAL* will give value received for every dollar spent in advertising, for the advertiser will be appealing to the owners of *THE JOURNAL* who are going to patronize those who patronize them.

If every member will do this for *THE JOURNAL*, in which he should feel a sense of ownership and interest, we can succeed in obtaining an advertising income which will enable us to greatly increase the size and improve the character of *THE JOURNAL* and at the same time put ourselves in touch with a class of reputable firms who are deserving of patronage and can be of service to us and we to them.

We have helped many firms catering to physicians to make fortunes, and we have seldom asked if our patronage and endorsement were rightly bestowed. Privately owned medical journals have prostituted their pages to the interests of dishonest advertisers for the profit to be obtained, and the rank and file of the profession, with nothing to guide them, have been the victims of the rankest deception. But with the establishment of medical journals which are owned, published and controlled by the medical profession and not by private interests it will be less possible for medical men to be victimized, for the reason that standards will be established and there will be no excuse for medical men not knowing what and what not to use and whom and whom not to patronize.

THE JOURNAL will refuse support in its advertising pages or elsewhere to those things which are known to be bad, either directly or indirectly, or to those things which are not known to be good. It will not sit in judgment upon those things which if good are not advertised in *THE JOURNAL*, but it will, under any and all circumstances, maintain that as a journal owned by the medical profession of the state and conducted on right principles it should have the earnest support of every one of its owners, and that support should be carried to the advertising pages.

SCIENTIFIC EDITORIALS

ADVANCES OF SURGERY IN 1907.

With honorable pride we contemplate at the beginning of another year the accumulating wealth of surgical science and art. Surgery advances inestimably within the cycle of a year. The apocalypse which opened the aseptic era was only the beginning of an interminable succession of useful and fascinating innovations.

The year 1907 will not be marked in history as one which has given epoch-making revelations, but rather as one in which there have been gleaned many helpful contributory bits, the sum of which is worthy to stand in comparison with the record of any year of the decades of marvelous progress since Lister wrought. With hundreds of worthy contributions recorded for the year, it seems an invidious task to select a few, if only for the purpose of illustration. It is clear that even the briefest recital of the important events would fill a volume.

From Europe one of the most interesting reports is that of a successful jejuno-esophago-gastrostomy for impermeable stricture of the gullet. This operation of Roux of Lausanne, the making of a new esophagus of a displaced segment of jejunum, carrying arterial supply through the arching branches of the vasa intestini tenuis, the trunks of these vessels being ligated before separation of the segment of jejunum by division of the mesentery below the ligatures, stands as one of the fine achievements of Swiss surgery. Roux successfully implanted the segment of jejunum preternally and subcutaneously. The case was one of traumatic stricture of the esophagus in a boy. Later, in a case of cancerous stricture of the esophagus, Verhoo-gen, of Brussels, successfully repeated Roux's operation, the patient dying shortly after of carcinoma cachexia. A third operation was reported from Antwerp. The performance of Roux has more than a theatrical interest. It opens the way into a great, new field. Two hours away from Lausanne, Roux's great compatriot, Kocher, has added during the year evidence of the superiority of the surgical treatment of exophthalmic goiter, presenting a record of cure in 73 per cent. of primary cases, of 92 per cent. of cures in combinations of exophthalmos with ordinary goiter, and 100 per cent. of cures in struma vasculosa. In all, 83 per cent. were improved by operation and only 3.5 per cent. died.

In England, Arbuthnot Lane has shown that resection of the entire colon for chronic consti-

pation is a procedure deserving serious consideration, for in more than forty operations there were no fatalities and the majority were quite cured. None were made worse. Owing to the pronounced enteroptosis constant in such cases, the technic is simple and the execution of the operation much easier than one might carelessly imagine. The open treatment of fractures advocated by Lane has found supporters everywhere, and the fatuity of leaving unopened any fracture in which there is the slightest doubt as to precise coaptation has become a fact.

In Great Britain the subject of accurate dosage in anesthesia has received unusual attention in 1907, with the result that the Vernon-Harecourt regulating inhaler, or a similar regulating device, is to be found in almost every clinic, the Skinner mask and drop bottle having been practically abandoned.

In spinal anesthesia Mr. Barker, of the University College Hospital, London, has found it easily possible to anesthetize one side of the body at a time or raise or lower the upper limit of anesthesia by simply observing the important rôle played by gravity upon the distribution of the foreign anesthetic fluid in the spinal canal. He used stovain, occasionally combined with adrenalin (or suprarenin, the synthetic analogue of the extract of the suprarenal gland). By changing the patient's position, i. e., lifting or lowering the trunk, placing the patient upon one side or the other, or bowing the back, he can determine with considerable precision the area of anesthetization. Mr. Barker illustrates this by using three glass tubes with curves corresponding to the curves of the spinal canal, fashioned after Braune's plate of a frozen mesial section of a female cadaver, and filled with a solution of the same specific gravity as the spinal fluid. Barker's stovaine solution (stovaine 10 per cent., glucose 5 per cent., aqua dest. 85 per cent., sp. gr. 1.0300), colored violet with methyl, is slowly introduced at a point corresponding with the usual point selected for spinal puncture, and a photograph taken two minutes later shows that the heavy solutions have gravitated downward (the pelvis being elevated three inches) to about a level with the fifth or sixth dorsal vertebrae, while Bier's solution (stovain 4 per cent., NaCl 11 per cent., epirenin borate, 0.01 per cent. sp. gr. 1.0058), which is lighter than the spinal fluid, remains near the point of injection. It is needless to say that Barker's observation is of considerable clinical importance.

Auschuetz, of Breslau, has shown that one can, in a very simple manner, attain good results in

the resection of even large portions of liver tissue and decries that complicated methods and unusual appliances are deemed necessary in resection of the liver. He says the important question is the ligation of the branches of the portal vein and of the artery. That this is possible is proven by the experiments of Kousnietzoff and Penski.

"In resections one can simplify the ligation of these vessels in two ways: (1) By making a clean, smooth incision through the liver tissue. The bleeding vessels on this smooth surface can be grasped with clamps and ligated. If one separates the liver tissue bluntly then the vessels, after the extreme stretching, tear and retract; they can then be grasped only with difficulty and uncertainty. In case of smooth incision, however, they can easily be found. The liver wound should, if possible, be made in the form of a wedge and closed by means of sutures. (2) The second method of procedure consists in the application of ligatures en masse as suggested by Kousnietzoff and Penski. One does not need, however, a particular guiding suture or special instruments as Kousnietzoff's needle, but can get along just as well with the Dechamps needle."

In America Van Buren Knott has described a liver suture which will permit the coaptation of a wound of the liver, at the same time controlling hemorrhage without the necessity of packing, and will also permit the radical extirpation of liver tumors. Parallel with the wound in the liver or with the area to be excised, and about one-half inch from its edge upon either side, he inserts deeply through the liver substance, by means of a large, round, blunt needle, a strand of No. 3 catgut. These needles are modifications of Kousnietzoff's blunt liver needles. The strands enter the liver tissue about one inch beyond the edge of the wound, run deeply through the liver substance and emerge the same distance from the opposite end of the wound. The ends of the catgut strands are fastened by drawing them up snugly and tying to either end of both strands a small ordinary skein of catgut, which, presenting a broad surface against the liver tissue, prevents the indrawing of the suture ends. Transverse interrupted sutures of No. 3 catgut are then introduced by means of a small, blunt needle in such a manner that they engage upon either side of the wound the buried long strand of catgut. These may be tied as rapidly as introduced and, exerting their traction upon the buried long suture, may be tied snugly, ensuring hemostasis and coaptation without the danger of their cutting out.

When it is desired to remove a portion of the liver tissue carrying with it a tumor, this may be done by excising between the buried long sutures a wedge-shaped ellipse of liver substance and introducing the transverse sutures as above described (November *Annals of Surgery*).

Stamm, of Ohio, has made a useful contribution to liver surgery in the form of a liver suture supported by bone plates taken from the thin blade of the scapula, the bone plates replacing the folded bundles of catgut used by Knott to keep gut sutures from cutting through.

Thomas S. Cullen, following the example of Keen and Tiffany in America, Terrier and Auvray in France, Langenbuch in Germany and Mayo-Robson in England, has repeatedly made successful hepatectomies, using a needle which, instead of being wedge-shaped on cross section like that of Kousnietzoff, is almost flat, making a smaller hole in the liver substance. However, like Knott, who also modified the Kousnietzoff needle, he disclaims any credit for introducing the real principle of the needle, which will push the vessels to one side instead of piercing them, and, like Mikulicz, he says the Kousnietzoff needle is the Columbus egg of liver surgery.

In Europe Freyer's suprapubic prostatectomy has attained a great popularity. It is a brilliant procedure and doubtless the safest and best in some varieties of prostatic hypertrophy, yet the report of St. Peter's Hospital for the year shows that of fifty-eight operations nine were fatal. Freyer often completes the suprapubic extirpation within a minute, a performance sure to appeal to those surgeons who like being timed with a split-second watch. Fistula almost never follows the method for the reason that the vesico-rectal fascia is not traversed.

Rovsing, of Copenhagen, said of Freyer's method at the German Congress of Surgery in April: "Technically, this operation is so wonderfully easy and rapid of performance that I readily understand and share the enthusiasm of the gentlemen who have resorted to it, but the operation is just as dangerous as it is beautiful and seductive. Of four cases of prostatectomy operated by me according to the Freyer method, one died on the second day of cardiac asthenia; a second developed, on the fourteenth day post-operationem, after the external wound was practically healed, profuse hemorrhage after the prostatectomy wound, and death was only averted through a firm tamponade after the method of Mikulicz. In two cases there developed narrow strictures which demanded the constant use of

bougies, and in one case the urinary retention was in no way influenced.

A useful contribution of the year is represented by Wederhake's silver-rubber-silk suture material. In the Copenhagen clinics nitrate of silver catgut has been used for years, but it was during the year just closed that Witzel and Wederhake described the method of impregnating silk with a mixture of metallic silver and rubber. It has been clearly shown that silk or linen bearing colloidin or rubber is relatively impenetrable so far as bacteria are concerned, for it does not absorb lymph. As to the value of silver as a bactericide, there will be no dispute. We predict a considerable vogue for this suture. Plain, black linen, too, with or without celloidin, is likely to become more generally used in America than it has been since the old days of iron-dyed linen and silk. The Mayos brought home from the Stiles clinic in Edinburgh a supply of black linen. Several years ago Halsted, of Baltimore, began to use black linen, believing that it is more readily seen against the tissues than the white Pagenstecher linen or Von Brun's hemp.

The year 1907 witnessed the adoption of towel clips to pin heavy sterile towels precisely round the edges of operative wounds. The long-handled towel clips of Moynihan are superior, the length and shape being such that they hang quite out of the operator's way. The most careful operators everywhere have begun to cover in this manner superficial tumors or large areas of skin to be sacrificed, as in the case of amputation of the breast, with a gauze towel shaped about the edge of the area to be removed so that all skin is covered over during the operation; that is to say, in amputation of the breast, for example, the towels are pinned with the clips all round the breast hanging away from the skin incisions, and all the skin included between the skin incisions is separately covered by gauze sewn fast around the edge of the island or held by the clips.

The year has seen the establishment of opsonin departments in laboratories attached to surgical clinics everywhere and vaccine therapy has taken as important place in the treatment of many surgical conditions, as tuberculosis of the bladder and kidney, lupus, tuberculosis of bone, in bacillus coli infections of the kidney, in common surgical infections with the streptococcus, gonococcus, staphylococcus, etc. The phagocytic power may unquestionably be increased in this way. Through the study of opsonic indices diagnosis has gained much. The work begun by Sir A. E. Wright, of St. Mary's Hospital, London, has been perhaps the most engrossing of the year.

The hopes which were entertained as to the value of trypsin in the treatment of carcinoma have not been realized. However, it has appeared that the trypsin treatment at least helps to prolong life and keeps nodules under control, bearing about the same relation to the treatment of carcinoma that the use of the mixed toxins of erysipelas and the bacillus prodigiosus does to the treatment of sarcoma.

In the Insbrook Clinic Suter has used the balsam of Peru in the treatment of 562 cases of open accidental wounds and has investigated the action of balsam of Peru in such wounds scientifically for the first time. He states that the agent mechanically incloses bacteria, and has, in addition, decided bactericidal power giving off bactericidal substances to the tissues, and that it possesses great chemotactic power. The kidneys were not irritated by its use. The results of local treatment of wounds were excellent.

In the Middlesex Hospital, London, Kellock notes good results from the use of sulphur in tuberculous sinuses and cavities, and remarks the superiority of this agent over iodoform under similar conditions.

Sir Arthur Fripp's method of bandaging the limb after operations upon the knee joint has found a welcome in this country. Briefly, the method consists of fixing the limb not rigidly but with a very thick, soft dressing so that while the limb is held in slight flexion it is not held rigidly in this position, a certain small range of motion being permitted by the dressing. It is claimed that its adoption has decreased perceptibly the percentage of cases in which loss of function is observed after knee-joint operations.

The value of the application of Bier's bandages with the consequent artificial hyperemia in the treatment of tuberculosis of bones and joints having been established, Hertzler, of Kansas City, and others have turned their attention to the study of the influence of hyperemia in the treatment of tuberculosis of the peritoneum, suggesting the use of a flanged tube to be left in the wound after celiotomy for tuberculous peritonitis, with a view of permitting continuous entrance of air, the presence of the air producing hyperemia. Hertzler remarks that hyperemia has been found of use in tuberculosis elsewhere, and by analogy we may be warranted in assuming that the same factor is active in the treatment of tuberculosis in the peritoneum. With these two facts in mind, it seems quite possible that this is the factor underlying improvement by opening the abdomen in some forms of peritoneal tuberculosis. "This assumption finds a clinical sup-

port in the fact that it is only the type with exudation that is so benefited. This is easily explained on this theory, for manifestly in the hyperplastic types the vessels cannot dilate to any considerable extent, therefore the operation can be of no use."

Among many interesting reports of surgery of the vascular system Monroe, of Boston, has advocated surgical interference in cases of the congenitally open ductus arteriosus, declaring that its ligation must be followed by constant and permanent restoration of the function of the lungs and arteries and that it can be reached by a short surgical route.

At the meeting of the British Medical Association Bland-Sutton advocated the removal of all infected gall bladders, broadly speaking, upon the hypothesis that bile is purely excrementitious and that the gall bladder, like the vermiform appendix, is practically useless.

To the observant it is clear that America is keeping abreast of the most progressive nations of the earth in the advancement of surgery. To the traveler abroad there comes nowadays the definite impression that American surgery is in the van. In clinics everywhere abroad the names of our teachers whom we love to honor at home are heard upon every hand. We are proud of the recent developments of surgery, and we are especially proud of America's fine part. It has been a good year for home pride.

JOSEPH RILUS EASTMAN, Indianapolis.

THE PROGRESS OF CLINICAL MEDICINE DURING THE YEAR NINETEEN HUNDRED AND SEVEN.

No epoch-making discoveries have signalized the history of medicine during the year which has just closed. It would be a great mistake, however, to assume that but little progress has been made. On the contrary, great activity has prevailed along various lines of clinical research, with a corresponding advance. To even indicate more than a few of the advances thus made would exceed the limits of this brief editorial review.

One of the most striking evidences of progress in the general field of clinical medicine is the phenomenon of the specialty of internal medicine which the last year, along with those which immediately preceded it, has helped to create. Its recognition is practically complete, as indicated by the utterance of Professor Osler in the introductory chapter to the first volume of *Modern Medicine*. He says: "The profession should

learn to recognize the worker in internal medicine as a man who has to devote so much time to his studies that it is impossible for him to take general practice, and in a way he is a specialist, in the broad sense of the term, like the surgeon." The depth and breadth and complexity of the problems which confront the clinician to-day can scarcely be better emphasized than by this phenomenon viewed in its proper light and significance.

Instead of merely cataloguing without adequate comment what has been done during the last year or so, I have decided to select a few subjects representative of the year's work and discuss them somewhat more at length, believing that by this means a better view of progress can be given and more actual information conveyed.

Among the fields of research already referred to may be mentioned the clinical relations of the internal secretions, and especially those of the thyroid gland and adrenal bodies. The pathology of Graves' disease may be considered as established at least to the extent of considering a hypersecretion of the thyroid gland as an essential and possibly sufficient factor in its causation. The assumption of a perverted secretion appears to be entirely uncalled for, as the physiological effect of the normal secretion experimentally or therapeutically given corresponds so closely to the syndrome of the disease as to leave but little doubt concerning its efficiency. While hypertrophy of the gland exists in nearly all the cases, and according to some observers is always present though sometimes unrecognizable, the essential thing is not the hypertrophy but the hypersecretion. It seems perfectly reasonable to suppose, as clinical observation indicates, that this hypersecretion may exist without any demonstrable increase in the size of the gland, although the observations of Macallum on sixty cases seem to prove that histological changes are constantly present. These changes are identical with those which are characteristic of experimental compensatory hypertrophy and consist of strands of fibrous tissue running like scars through the gland, while the alveoli become irregular, the colloid being diminished or absent, and the epithelium becomes converted from the low cubical to the columnar type. The pressing question is what causes these anatomical changes, and we are at present without any definite information along this line, although it may be fairly assumed to be some sort of a toxic process. The therapeutic indications derived from these data are fairly well defined. We can not reach the

ultimate causes for the very good reasons that we do not know what they are, and, besides, they have become fully operative and produce their results before the patients present themselves for observation. We can, therefore, only deal fundamentally with the clinical fact of hyperthyroidism.

There are two ways of approaching this problem: first, by diminishing the secretion of the gland; and, second, by neutralizing and rendering innocuous the excess of secretion after it has found its way into the circulation. The first method constitutes the surgical treatment either by intra-glandular injection with a view to destroying the secreting structure of the gland or by ablation of more or less of the gland structures. The first of these methods has proven unsatisfactory, while excision, if we may judge from the enormous experience of Koehler, Halsted and others, offers the most available hope of permanent cure.

The medical treatment should undoubtedly be given a trial first and should include, along with rest, proper hygiene and general symptomatic control and the injection of sera or other therapeutic preparations derived from the blood of thyroidectomized animals. If these measures properly carried out, preferably under a hospital régime, do not lead to progressive improvement, then, in the writer's opinion, thyroidectomy should be advised, possibly preceded by ligation of one or more of the thyroid arteries, and it should be done early, before myocardial or other degenerative changes occur. With these measures at our command the percentage of hopeless cases of Graves' disease should grow smaller and smaller in the future.

Our experience with Addison's disease justifies the belief that one-sixth of the cases can be cured by the timely and persistent use of suprarenal extract, while a considerably larger proportion, perhaps 25 per cent. more, can be substantially benefited. It does not appear that surgery can help us here, because in so far as the adrenals are involved it is the loss of secretion, as it is of the thyroid in myxedema, which lies at the bottom of the syndrome.

Another, and possibly the most important, field of active clinical research during the past year is that of vaccine therapy, including its control by the opsonic index. The technical difficulties still encountered in studying the opsonic index are very nearly prohibitive of its widespread use at this time. The errors of individual observations are admittedly so great that several indices should be taken before allowing it to

serve as the unsupported basis of an important practical conclusion. This, however, has no bearing upon the value of vaccine therapy. Its widest application appears to be in the field of chronic or subacute infections such as that of tuberculosis. While professional opinion in regard to many aspects of the question must be regarded as still in a formative stage, the fundamental facts are beyond contention. The central truth, which has been fully established, that the injection of dead bacteria or the products of bacterial growth, in proper dosage, strengthens the defenses of the body, at least against those particular micro-organisms, and possibly others as well, is supported by an accumulation of facts which should be regarded as entirely conclusive. Clinical observations in support of this view are not limited to the period of technical work by the so-called opsonic methods, but extend back over a period of years, including Pasteur's immortal pioneer work on rabies and the empirical use of the old tuberculin in the treatment of tuberculosis. These methods, as well as others, were in use by many clinicians, the writer included, long before opsonins had been christened or opsonic methods given a place in clinical medicine. In the opinion of many their efficiency as an important adjunct in the treatment of tuberculosis, the scientific reasons for which were made clearer by Wright's work, was beyond reasonable doubt. While the devitalized tubercle bacilli have formed the basis of the opsonic work, Ross, a co-worker with Wright, defines a bacterial vaccine as "bacteria or their products," so that the use of the old tuberculin comes strictly within the scope of the term. There seems to be excellent biological reasons, supported as they are by clinical experience, that both the old and new tuberculin should be regarded as valuable agents in the treatment of tuberculosis, the former perhaps stimulating the production of antibodies, the latter that of opsonins. On the whole, while we are still feeling for solid ground, it is difficult to avoid the conviction that we are near the culmination of the greatest therapeutic triumph of the ages, thanks to the labor of Koch, Pasteur, Metchnikoff, Wright and others. As Ross has recently pointed out, the hazards of incompetent and ill-judged over-exploitation of these methods needs to be guarded against. Conservatism and caution are imperative until their precise limitations are better defined, but it seems certain that they will occupy a conspicuous place in the therapeutic field of the future.

In a general way one might say that the advancement during the last year has been largely

along biochemical lines. The illustrations already given belong strictly within this domain; and while they may be unusually favorable examples, it is not too much to say that there has been a general advance, although perhaps less conspicuous in many other departments of clinical research.

GEORGE W. McCASKEY. Fort Wayne.

EDITORIAL NOTES

IT WILL be our aim to have THE JOURNAL in the hands of members on the morning of the 15th of each month.

THE postal officials do not permit us to send THE JOURNAL regularly to any but *bona fide* subscribers. Therefore, before you write us concerning failure to receive THE JOURNAL it would be advisable for you to make sure that you have paid your State Association dues, which include a subscription to THE JOURNAL.

THE annual session of the Indiana State Medical Association will be held at French Lick, June 18 and 19. Our May number will have a preliminary announcement and program of the session, and our June number, which will be in the hands of our members by June 10, will be a special French Lick number, giving full information concerning the session.

WITH the passing of the bound "Transactions," as little appreciated as they were on account of form and manner of publication, we desire to pay tribute to Dr. A. W. Brayton, who conscientiously and ably edited them for so many years. His labor was essentially one of love, for he was never adequately paid for his services, and he fulfilled the duty creditably alike to himself and the Association and in such a manner as would be expected from one of his recognized literary and scientific attainments.

WE are starting out with clean advertising pages. To do so it has been necessary to refuse over two thousand dollars' worth of such advertising as is regularly accepted by some of the most prominent medical journals in the country. But we believe that every right-thinking physician in Indiana will approve our course, as we also believe that very soon every prominent medical journal in the country will have to refuse objectionable advertising or go out of business,

because all right-thinking doctors will refuse to support or read any journal which publishes nostrum or other objectionable advertisements.

IN THE advertising pages of this number will be found a county medical society directory, containing the name of every organized county medical society in the State, the name and address of its secretary, and the time and place of holding regular meetings. Every county secretary has received a request for information concerning his particular Society for publication in this directory. As will be seen, many secretaries have failed to furnish the requested information, and in consequence many blank spaces appear in the directory. We hope that the directory in our next number will be complete, and to that end we urge the county secretaries to furnish all missing information, as well as to call our attention to any changes which should be made.

THE first number of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, published at Fort Wayne, Ind., will come from the press early in January, 1908. It will be edited by Dr. Albert E. Bulson, Jr., assisted by Dr. Ben P. Weaver. It will be a monthly periodical, published and controlled by the members of the Indiana State Medical Association. In starting his work Dr. Bulson will have the great advantage of experience, for he has been the bright and entertaining editor of the *Fort Wayne Medical Journal-Magazine* for a number of years. We congratulate the Indiana State Association upon having secured his services. A good, practical man, too! The glad hand, Mr. Editor!—*Journal of the South Carolina Medical Association*.

Thanks, Brother Editor; we hope that we may merit the compliment.

"UNCLE" JOE CANNON is gloating over the fact that he was re-elected speaker of the House in the face of opposition from the labor organizations. If he secures the presidential nomination perhaps he will regret that he has unnecessarily antagonized the labor organizations, as he may also regret the insults he has offered the medical profession. The members of the Legislative Committee of the American Medical Association who called on him last year, all his peers in culture and refinement, will not soon forget the discourteous reception at his hands, his uncouth manners, and the sneering way in which he referred to the medical profession in general, and it is not likely that medical men as a class will

be found shouting his praises or sacrificing their self-respect by voting to further his ambitions. It is time for medical men to look beyond party politics when exercising the right of suffrage, and, if they do, Cannon and his ilk will receive the rebuke they justly deserve, for the medical profession can be a power in politics.

A NUMBER of our county medical societies have adopted the postgraduate course of study and without exception the reports show that the plan is meeting with success. In some of the societies the work is being carried on with unusual enthusiasm and interest and with an accompanying increase in membership and attendance. To those societies that have not as yet considered the postgraduate course of study we recommend a careful investigation of the work as done by the societies that have adopted it. Some alteration in the plan, to meet local conditions, may be necessary in certain instances, but in the main the program as arranged by the A. M. A. Committee on Postgraduate Study is worthy of adoption. Full particulars may be secured by addressing Dr. John H. Blackburn, Bowling Green, Ky.

THE physicians of the Ninth Indiana Councilor District have dealt a severe blow to the nostrum houses, and many well-known medical journals, when they pledged themselves to use no medical preparations which are not contained in the official United States Pharmacopeia or National Formulary or in the list of New and Non-official Remedies approved by the Council on Pharmacy and Chemistry of the American Medical Association, and to refuse to receive or subscribe for any medical or religious journal which advertises fraudulent or worthless nostrums and proprietary medicines after Jan. 1, 1908.

This is an exhibition of the right kind of spirit, and we hope that the physicians of every other councilor district in the State will make a similar pledge and abide by it.

THE Stewart-Hord Sanatorium, of Shelbyville, Ind., is sending letters to physicians soliciting whisky, morphin and drug habit cases on a commission basis. The doctor receives twenty-five dollars (\$25.00) for referring the case and the patient pays one hundred and twenty-five dollars (\$125.00) for "the cure." This is called a "liberal offer to physicians," but no physician who desires to maintain his self-respect will have anything to do with such an offer. If the Stewart-Hord Sanatorium is deserving of recognition and patronage from medical men, it can secure it

without resorting to the deceptive practice of paying a commission to obtain the business, for every conscientious physician will refer his patients where he honestly believes they are to receive appropriate attention, and he will collect his fees from the patient for any advice rendered. But if anything is needed to condemn the Stewart-Hord Sanatorium as unworthy of recognition and patronage by intelligent and ethical physicians, it is only necessary to read some of the breezy correspondence which has emanated from the proprietors in answer to numerous inquiries as to their methods and standing.

SOME of the county medical society secretaries to whom we sent a request for the early payment of dues (including subscription to *THE JOURNAL*) for the purpose of meeting the expenses connected with the establishment of *THE JOURNAL*, have inquired as to the disposition of the dues paid in 1907 and if the transactions for 1907 would be issued. To these inquiries we wish to make the following answer: The dues for 1907 were used in paying the bills incurred in 1907, including the publication of the 1907 transactions which will probably be in the hands of members by the time this journal is published. The 1908 dues will be used in paying bills incurred in 1908, including the subscriptions to *THE JOURNAL*. Heretofore it has been customary to pay dues just before or at the time of the annual meeting, and there was little reason for paying the dues sooner, as but few bills were contracted prior to the date of the annual meeting. But with the establishment of *THE JOURNAL* the expenses begin even before the publication of the first number and continue throughout the year, and in consequence the dues are required to pay the subscriptions, which, in turn, are used to meet *THE JOURNAL* expenses. The members are paying no more than usual, but are simply asked to pay the dues with the beginning of 1908 instead of three or four months later, and in return are to receive *THE JOURNAL* for the entire year.

IT HAS been said, and perhaps truthfully, that any secretary can either make or break the organization he is elected to serve. We do know that the life of the county medical society depends, in a very large measure, on the work of a capable, energetic and faithful secretary. How necessary it is, then, to select for the office a man who is fitted for the work, and not one who is given the position out of respect for his gray hairs, his mental attainments, his political pull, his ability

to be "a good fellow," or the friendship which all medical men have for him.

The selection of a capable secretary is a business proposition and as a business proposition it should be considered. There is scant honor in the position, but much hard work if full justice is done to the office. Not all men possess the necessary qualifications, but every society possesses at least one such man, and he should and usually is willing to accept the office for the good of the medical profession of his community. Self-sacrifice is necessary, but nothing good in this world was ever accomplished without self-sacrifice, and we will all contribute to the fund of self-sacrifice if each does his part in helping to make the county society what it is intended to be and what it ought to be—an organization for the scientific, ethical and social betterment of its members.

We particularly urge the members of county societies to select secretaries with caution. If any society has a good secretary, then that secretary should be continued in office; if the secretary is a poor one, then he should be replaced by a better one, and if any society has a poor secretary and it is impossible to get a good one, then it is time to invite some capable and energetic young man to locate in the county not only to become secretary of the county medical society, but to awaken a little interest in a medical community that is fast approaching the last stages of decay.

THE doctors of Indiana are now receiving letters from various candidates for state offices and their friends soliciting support. Before any doctor pledges his support to any candidate for a state office it would be well to definitely determine where that candidate stands on questions of interest to the medical profession. We have had unfortunate and sometimes humiliating experiences with governors and members of the Assembly which should stand as a lesson to us, and when we pledge support at the caucus or at the polls let it be with a full knowledge that our candidate is not only in sympathy with, but will vote for, those measures which are championed by the medical profession as a whole.

We need better and more far-reaching laws pertaining to public health, sanitation, food inspection, medical registration and examination, medical education, vital statistics, the care of the dependent, and many other things of equal importance, in which the physician takes a personal interest, and the public should be interested because receiving the greatest benefit. Men aspiring to state office should be given to understand that they must champion and vote for these bene-

fits if the vote and influence of the doctor is to be secured. It is not enough to pledge support because the candidate belongs to any particular political party.

In this connection we desire to call attention to the motion passed at the last meeting of the Council to the effect that "any Indiana candidate for county, state or national office shall be interviewed by the councilor of the district in which such candidate resides, or some one deputized by the councilor, and information obtained as to the probable attitude of such candidate on questions vital to the best interests of the medical profession, and that the views given by the candidate be made known to the Council for publication in *THE JOURNAL* or such other publicity as may be deemed advisable or expedient."

It is asserted by certain newspapers of the state that Dan G. Reid, multi-millionaire, railroad man, steel magnate and newspaper owner, will supplant Albert J. Beveridge in the United States Senate three years hence if certain plans set on foot months ago, in a quiet way, can be carried out. James E. Watson, one of the candidates for governor, is said to be one of the leading figures in the drama that has been seriously planned, as he and Reid are very close friends, and it is even reported that Reid is financing Watson's campaign.

What a pity it is that positions in the United States Senate as well as in the national House of Representatives can not be divorced from the spoils system. Here we have an example of a man aspiring to the position of United States senator (a habit with many millionaires) with but little to commend him other than his millions and his supposed willingness to let loose some of his hard-earned (?) money among a lot of political leeches who no doubt would greedily enlist their sympathies and aid in his cause. Senator Beveridge is one of the nation's great men today, and he is a man whose signal ability as an orator and a statesman has been coupled with an unusual amount of that common honesty and a sense of duty so lacking in many of the men selected to represent the people at the nation's capital. He has been a justly prominent factor in the Senate, and his distinguished services have been a credit to the nation and to his own state of Indiana. Of such men we should be proud, and until the short-sighted, spoils-grabbing politicians in the Republican party of Indiana can produce his equal in mental caliber, integrity and general fitness for the high position he now occupies, it is the height of folly to entertain for

a moment the thought of retiring him to private life. Medical men owe a debt of gratitude to Senator Beveridge for his support of so many measures advocated by the medical profession, but they owe allegiance to any man, be he Republican or Democrat, who so ably and so conscientiously represents the people of this great state.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. It sounds well, but what does it mean? It means that the Indiana State Medical Association has taken a step that is in keeping with the reputation which the medical profession of Indiana has established for progress and all that goes to make success for medical men. For many years the Association published at great expense the bound "Transactions," which came from press six to nine months after each annual meeting, and contained simply the proceedings of the annual meeting and a list of county and state society members and officers. The book was considered of so little value by a large proportion of our members that hundreds of volumes usually remained uncalled for in the offices of county secretaries, and those volumes that did find their way into the hands of members usually found a resting place on a library shelf, where they remained unopened and often times without the wrapper being removed.

Other state societies have had the same experience, and, appreciating the advantage of doing away with "Transactions," have established journals in their place, and always with the greatest satisfaction and benefit. We are, therefore, keeping up with the progress of other state societies in establishing a journal as an official organ of our state medical association, and we are doing this without adding to the expense of the association, for the Council has specifically provided that the expense to the association of publishing *THE JOURNAL* shall not exceed the expense previously incurred in printing the "Transactions."

We propose to publish a journal which shall perform all the functions which any progressive and good medical journal should perform, and at the same time be the official organ for the Indiana State Medical Association for the publication of the transactions of the association and its affiliated societies. *THE JOURNAL* will be distinctively a periodical for Indiana physicians, and it will be our aim to make it so interesting and so good that every doctor in the state will want it, and raise a commotion if he does not get it. In the pursuit of this policy we hope to greatly assist the efforts of councilors and county society officers in securing new members as well as

stimulating interest in society work. Our members will be kept informed on questions pertaining to the work of the Board of Medical Examination and Registration, the Board of Health, and all legislation concerning the interests of the medical profession. Personals and medical news notes of general interest will occasionally appear, as also abstracts from current medical literature. Original articles from Indiana men will appear when the department devoted to such contributions is not fully occupied by the papers read before our annual meeting and approved for publication. Society proceedings and announcements, including reports from county and district societies, will be given prominence. And, all in all, we hope to give the members a journal that will be appreciated and considered the best thing for which the Indiana State Medical Association is responsible.

DEATHS

Deaths of Indiana Medical Men.

DR. CHARLES CAMP, of Camden, died in California the last of November. He was the oldest practicing physician in Carroll County, being over 70 years of age.

DR. HAMILTON WOLFE died at his home in Washington, on November 9, at the age of 88 years. Dr. Wolfe practiced medicine for fully fifty years and was one of the leading physicians in his part of the State until fourteen years ago, when he retired.

DR. RATER GRAY died at his home in Portersville, November 20, at the age of 26 years. Dr. Gray was a graduate of the Louisville Medical College, and after leaving that institution first located at Alford, later going to Petersburg, and still later to Portersville, where he practiced for the last two years of his life. He leaves a wife and two children.

DR. THOMAS BARNETT WILLIAMS died at his home in Angola, Aug. 16, 1907, at the age of 68 years, 10 months and 28 days. Dr. Williams was born at Baltimore, Md., Sept. 6, 1838. He graduated from the Cleveland Medical College in 1863 and was physician in the U. S. Marine Hospital at Cleveland, Ohio, in 1864. He located at Angola late in 1864 and practiced there until his death. He was a member of his county and state associations and the American Medical Association. At the time of his death he was health officer for the city of Angola and president of the Stuben County Medical Society.

DR. HUBBARD M. SMITH, physician, writer, educator and venerable president of the Board of Trustees of Vincennes University, died at his home in Vincennes, Dec. 23, 1907, aged 87 years. Dr. Smith suffered a fall on the 4th of December, fracturing his hip, and the forced quietude and old age brought on a revival of some of his old ailments and finally pneumonia set in, causing his death.

Dr. Smith's early life was one of hardship, and his early medical education was largely acquired at odd hours during a period when he was teaching school in Kentucky. After a partial course of instruction at the Transylvania Medical College in 1843 he commenced the practice of medicine at New Liberty, Ky., where he remained about six months, then moving to Warsaw, Ky., where he practiced medicine until 1847. In that year he began a regular course of instruction at the Starling Medical College, Columbus, Ohio, and he received his medical degree two years later. Following his graduation he located at Vincennes, where he practiced continuously until the time of his death.

One of the early experiences of Dr. Smith was his recognition of cholera at Vincennes in 1849, which caused alarm and excitement among the people, protest from fellow physicians and more or less enmity. Dr. Smith bravely held to his opinion that the town was stricken with cholera, and the physicians and people were finally forced to believe that his opinion was correct.

In 1858 Dr. Smith purchased the *Vincennes Gazette* and immediately commenced to champion the cause of Abraham Lincoln in his memorable canvass against Douglass, the *Gazette* being one of the first papers to put forward the name of Lincoln for President. Immediately on Mr. Lincoln's election and installation as President, in 1860, Dr. Smith was appointed postmaster at Vincennes and held the position until 1869.

Having always been actively interested in educational affairs, he was elected in 1876 a member of the board of trustees of the Vincennes University, and in 1897 became the president of that board. In 1849 he became a member of the Knox County Medical Society, and he became a member of the Indiana State Medical Association on its organization in 1876. He was also a member of the American Medical Association, the first meeting of which he attended at Cincinnati in 1852. He was a charter member of the Tri-State Medical Association, which originally embraced Indiana, Illinois and Kentucky, and which, outgrowing its territory, assumed the name of the Mississippi Valley Medical Association.

He became a Master Mason in 1845, and at the time of his death was the oldest member of the Vincennes lodge. He was a member of the Western Writers' Association, having joined on its organization, and even contributed poems at its annual meetings. Benjamin F. Parker's late issue of "Indiana Poets" contains several selections from Dr. Smith's poems. In his younger days his poems were published in *Peterson's Ladies' Magazine*, *The Philadelphia Saturday Courier*, the old *Louisville Journal*, the *Cincinnati Art Journal* and other prominent journals and papers of that time. A collection of poems, entitled "At Midnight and Other Poems," were published in book form by Carlin & Hollenbeck in 1898. His last contribution to the bookmakers was "Historical Sketches of Old Vincennes." His contributions to medical literature have also been published from time to time.

He was a diligent student, an apt scholar, a clear thinker and a logical reasoner. He always had the courage of his convictions, and no power or influence was ever strong enough to cause him to deviate for a moment from what he regarded as the high path of rectitude. He believed it to be his patriotic duty to take an interest in the affairs of his city, his State and nation on all matters of public interest. His more than fifty years' record as a practicing physician was ideal from the standpoint of both the profession and the laity. No taint of any professional misconduct was ever attached to him, and he always had the unbounded respect of his fellow practitioners and the love and gratitude of his patients. He left an impress for good on the community in which he lived that will remain for many years.

The Death of Nicholas Senn.

DR. NICHOLAS SENN, former professor of surgery in Rush Medical College, and one of the world's most distinguished surgeons, died at his home in Chicago, January 2, as a result of heart disease, with which he had suffered for ten weeks. He was a physician of international reputation, and the results of his studies in surgery and pathology have become a part of the medical history of the age. A man of culture, refinement and thorough education, Dr. Senn was peculiarly fitted for the honored position he held in his profession, and his success as a surgeon placed him among the great medical men of the day. During his active career he found time to contribute to surgical literature a large number of valuable works. As a teacher his success was evidenced years ago, when he first entered that

field of the profession, by the popularity with which his lectures were received by medical students.

Dr. Senn was born in Switzerland in 1844. When 7 years of age he came to this country with his parents. The family settled at Fond du Lac, Wis., the same year. The boy was sent to the public schools and finally entered the office of a country doctor, where he took up the study of medicine. For several years Dr. Senn practiced at one of the smaller towns in northern Wisconsin.



NICHOLAS SENN, 1844-1908.

sin, finally moving to Milwaukee, where he soon made a reputation as a surgeon of more than ordinary ability, and eventually became recognized as one of the great surgeons and writers of the country. About fifteen years ago he removed to Chicago, where he was already interested as professor of surgery in Rush Medical College. Since that time his reputation as a surgeon and writer has broadened until there is no country where he was not well and favorably known.

PERSONALS

DR. E. O. BURESS has located at Portersville.

DR. H. C. KNAPP, of Vincennes, has located in Huntingburg.

DR. W. R. BOGGS, formerly of Illinois, has located at Salem.

DR. G. W. ANDERSON has begun the practice of medicine at Cossuth.

DR. W. P. ALEXANDER has removed from Camden to the new town of Gary.

DR. WM. F. RUST, of Holland, is at St. Louis, Mo., doing postgraduate work.

DR. E. S. BAKER and family, of Lafayette, are spending the winter in California.

DR. W. S. CAMPBELL has been reappointed health officer for Tippecanoe County.

DR. ALLISON MAXWELL, of Indianapolis, left the latter part of November for Europe.

DR. L. C. CLINE, of Indianapolis, recently started on a pleasure trip around the world.

DR. R. B. EARP, of Dunkirk, left December 17 for an extended tour through the west.

DR. P. R. URMSTON, Valparaiso, and LOUISE M. TILLOTSON, Bay City, were married Oct. 29, 1907.

DR. EARL VAN REED, of Lafayette, formerly interne at St. Elizabeth's Hospital, has located in Lafayette.

DR. E. P. EASLEY, of New Albany, is in Philadelphia and other eastern cities taking postgraduate work.

DR. A. B. KNAPP, of Washington, is spending the months of January, February and March in California.

DR. C. E. CAYLOR has opened a hospital for the public at Pennville. It has accommodations for eight patients.

DR. AND MRS. FRANK W. FOXWORTHY, of Indianapolis, have returned from a four months' sojourn in Europe.

DR. NOAH D. BERRY, of Muncie, on Dec. 16, 1907, sustained a Colles fracture of the right wrist, due to a fall on an extended hand.

DR. EDWARD GORDAN, coronor of Lake County, announces as his deputies for 1908 Drs. E. M. Shanklin, W. F. Houk and H. L. Iddings.

DR. RICHARD B. WETHERILL, of Lafayette, started, on October 15, for a trip around the world. He expects to be gone about ten months.

DR. W. C. CAUBLE, secretary of the Washington County Medical Society, has been elected secretary of the Washington County Board of Health.

DR. HARVEY MITCHELL, retired, Delaware County's oldest physician, fell at his home Dec. 21, 1907, sustaining a fracture of the neck of the left femur.

DR. CYRUS W. CAMPBELL and wife, of Hammond, have gone to California to spend the winter, with the hope that the doctor will regain his failing health.

DR. GEO. R. GREEN, of Muncie, sustained a Colles fracture of the right wrist, due to accidental release of crank while cranking an automobile on Nov. 9, 1907.

DR. JOSEPH RILUS EASTMAN, of Indianapolis, who has been in Europe for more than a year, has returned and resumed his work in the Indiana Medical College.

DR. GEORGE FREDERICK SHRADY, the founder of the *Medical Record* (New York City), an eminent surgeon, died at his home in New York City Nov. 9, 1907.

DR. W. W. WOOD, formerly a practicing physician at Angola, has abandoned the practice of medicine and taken a position as traveling salesman in the New England States.

DR. E. E. EIFFERT, a graduate of the Indiana Medical College, class of 1907, and Dr. A. F. Gutzsell, a graduate of the Kentucky School of Medicine, class of 1907, have located at Jasper.

DR. GEORGE W. MCCASKEY, of Fort Wayne, delivered the address on medicine at the sixty-third meeting of the Northwestern Ohio Medical Association, held at Toledo, Ohio, December 11.

DR. J. D. HILLIS, health officer for the city of Lafayette, has been systematically enforcing the new pure food law, with the result that Lafayette is showing a marked reduction in the amount of illness in the city.

DR. JOHN W. SLUSS, of Indianapolis, has been appointed secretary of the Marion County Board

of Health at a salary of \$1,200 per annum, succeeding Dr. Carl McGauhey, who, in turn, becomes deputy coroner.

Mrs. LILLIAN STOLTZ, wife of Dr. Charles Stoltz, of South Bend, died on December 7. Mrs. Stoltz was prominent in social and educational affairs in South Bend and, like her husband, enjoyed the friendship and esteem of a very large circle.

Drs. WM. SHIMER and H. R. McKINSTRY have completed their terms of service as internes at the City Hospital and located in the city of Indianapolis for practice, the former at 316 North Meridian street and the latter at the corner of Thirtieth and Illinois streets.

Dr. KENNETH JEFFRIES, for several years physician to the Eastern Insane Hospital, has resigned his position and gone to New York for a few months of clinical work, after which he will practice in Indianapolis with his father, Dr. W. E. Jeffries, 814 Virginia avenue.

Dr. THOMAS J. BEASLEY and Miss NELLIE LOOMIS, of Indianapolis, were united in marriage at Indianapolis, Dec. 11, 1907. Dr. Beasley is a recent graduate of the Indiana Medical College and now has charge of the Rockwood Sanitarium for Tuberculosis near Danville.

Dr. GUY P. LEVERING, of Lafayette, coroner of Tippecanoe County, with his bride, left on a wedding trip to Europe June 15. Deputy Coroner W. M. Reser, of Lafayette, followed the example of the coroner by marrying on October 16. Dr. Reser and bride took a wedding trip, which included visits to numerous Eastern cities.

NEWS, NOTES AND COMMENTS

THE physicians of New Albany and Jeffersonville have taken up the postgraduate course of study.

THE physicians of North Vernon have decided to charge double fees for all sick calls attended within the city limits between the hours of 9 p. m. and 6 a. m.

THE Fort Wayne Medical Society has taken official action concerning the hiding of cases of contagious and infectious diseases, and has determined to support the Board of Health in efforts to suppress the practice of covering up communicable diseases for any cause whatsoever.

THE Louisville Medical College and the Hospital College of Medicine, both located at Louisville, Ky., have combined under the name of the Louisville and Hospital Medical College, continuing as the medical department of Central University.

THE secretary of the Green County Medical Society reports the following removals: Dr. W. H. Cole, from Switz City to Elnora; Dr. R. T. Cook, from Solsberry to Bowling Green; Dr. V. S. Shanklin, from Vicksburg to Terre Haute; Dr. J. U. Pickel, from Midland to Indian Territory.

THE Northern Tri-State Medical Association meets at Toledo, Ohio, on January 14. Dr. Albert E. Bulson, Jr., of Fort Wayne, is president of the association, and Dr. Wm. F. Shumaker, of Butler, is secretary. Indiana physicians represented on the Toledo program are as follows: A. C. Yoder, Goshen; M. Stamm, Fremont; M. F. Porter, Fort Wayne; H. F. Mitchell, South Bend; K. K. Wheelock, Fort Wayne.

THE Indianapolis City Council, on Dec. 11, 1907, voted to allow the Board of Health \$51,000 for the completion of improvements in the City Hospital. The attempts of the board to enforce the ordinance against the crowding of people in insufficient quarters (as many as 18 Hungarians being found sleeping in one small room) have been frustrated by the decision of Judge Whallon, who declared the ordinance invalid.

THE Delaware County Hospital Commission has recently purchased, through the beneficence of Mr. James Labaytaux, of Delaware County, the old McCulloh home in Muncie, to be converted into the Delaware County Hospital. The site is centrally located and one of the most desirable in the city for the purpose, and was secured by the commission for a consideration of \$18,000. The building will, in the near future, be thoroughly renovated and equipped by the commission, and will be maintained by the county under the statute providing for the maintenance of county hospitals.

A CASE of poisoning from antikamnia is reported by Dr. H. N. Rowell in the *California State Journal of Medicine*. An experienced nurse, suffering from an ulcerated tooth, on the advice of her dentist had taken antikamnia. She had taken ten grains. When examined by Dr.

Rowell she was found in a state of collapse, and a half-hour's work with various restoratives was required to bring about consciousness. The patient had no idiosyncrasy, as she had taken coal tar derivatives in the past, but under the direction of her physician. The package from which the tablets were taken was marked "Sample Package," and, she alleges, was left at her door.

THE physicians of Bellefontaine, Ohio, have taken action regarding evening office hours, thus limiting, in all except emergency cases, the number of hours of a physician's working day. An agreement, signed by practically every physician in the town, has been published in the local papers, whereby the physicians agree to close their offices at 6 o'clock each evening except Saturday. Patients are requested not to make demands on the physicians during the evening hours except in cases of emergency. By closing their active work, so far as possible, at 6 p. m., the physicians of Bellefontaine hope to have the evening for study and reading, thus increasing their ability and the value of their services to their patients.

THE new Methodist Hospital at Indianapolis, although still incomplete, held open house New Year's day. A turkey dinner was furnished from 12 to 2 by the ladies of Hall Place M. E. Church, and a general reception from 2 to 6 by the ladies of the Methodist churches of the city. Over 6,000 persons visited the hospital during the day, and the sum of \$3,600 was contributed toward the finishing of the structure. Miss Marilla Williams, of Jeffersonville, a trained nurse and not a physician, was chosen superintendent of the hospital at the meeting of the board. She received her training at the Deaconess Training School of Chicago and has had charge of the Jeffersonville Hospital for the past eight years. Among the applicants or candidates mentioned for this position there were sixty physicians. The directors hope to have the hospital ready for occupancy in about three months.

GOVERNOR HANLY issued three Christmas pardons to red-handed murderers. Every year several men, who have been given life sentences for crimes that merited such punishment, are thus turned loose, their release vitiating to an extent in the public mind the force of the life sentence. This is one of the potent reasons why the people oppose the abolition of the death penalty. They do not fancy the idea of sending to prison for life some infamous beast who richly deserves hanging, only to see him paroled a few years later by

some sentimental governor with a mistaken "Christmas spirit" gnawing at his "innards." So long as the pardoning power is so freely employed, the good people of Indiana will insist on keeping a good supply of hemp rope up at Michigan City for certain distinguished citizens who manifest a reckless disregard for human life.—*Fort Wayne News*, December 26.

THE AMERICAN MEDICAL ASSOCIATION announces that the first number of the *Archives of Internal Medicine*, a journal devoted to the publication of articles relating to internal medicine which are too technical or too elaborate for a journal of general circulation, will come from press some time this month. The *Archives* will not conflict with other publications now in existence, but will be, as it were, a connecting link between technical journals, and representing special work so far as it relates to the internist and medical journals in general, for which such matter would be too technical, too theoretical or too experimental in character. The editorial board is made up of the following well-known men: Joseph L. Miller, Chicago; David L. Edsall, Philadelphia; Richard C. Cabot, Boston; Theodore C. Janeway, New York City; George Dock, Ann Arbor; W. S. Thayer, Baltimore. The subscription price will be \$4.00 a year, but as an introductory price a reduction of \$1.00 will be made to members and subscribers to *The Journal of the A. M. A.*

IN THE suit of the Memphis Keeley Institute vs. the Leslie E. Keeley Company, the fraudulent character of the "Keeley Cure" has been fully exposed. In the trial it developed that the Keeley Company built up and maintained its business by fraudulent representations, and the higher court maintained that there was abundant evidence to prove that the Keeley business obtained its start and reached its eminence by gross misrepresentations, and that a company thus preying on the public should not be protected in its frauds by the court. The evidence showed, as every physician knows, that there is no such salt as the "double chloride of gold," and, furthermore, that there is no gold in any form whatsoever in any of the so-called Keeley gold cure remedies. At one time Keeley's reputation as a public benefactor was heralded far and wide by pulpit and press, but the evidence now shows, what many intelligent physicians always thought was the case, that Keeley was a swindler of the worst type and the "gold cure" a rank humbug foisted on a gullible public for profit.

THE Committee of the A. M. A. on "Legislative Measures to Prevent Ophthalmia Neonatorum" recommend the following form of law as a basis for legislative action, to be modified to suit the needs and legal situations in each state, and physicians are urged to cooperate, both individually and collectively, with the committee to secure its enactment:

AN ACT to Prevent Inflammation of the Eyes of the Newborn Babe, or So-Called Ophthalmia Neonatorum.

SECTION 1. The department of health of this state is hereby vested with power and authority to publish and distribute such information and instruction, to furnish such remedies, and to make such rules, regulations and ordinances as it may deem expedient to prevent the development of inflammation of the eyes of the newborn babe, or so-called ophthalmia neonatorum, in public hospitals or institutions in which midwifery is practiced either wholly or in part, and in connection with the practice of legally licensed midwives.

SECTION 2. Said department is authorized to enforce its rules, regulations and ordinances at the expense of the state.

SECTION 3. Any person violating any rule, regulation or ordinance of said department of health regarding the prevention of ophthalmia neonatorum shall be guilty of a misdemeanor. This act shall take effect immediately.

IN *Collier's Weekly* a strong tribute is paid to the progressiveness of the Massachusetts Board of Health. An act which took effect on Sept. 1, 1906, provides that "it shall be unlawful for any person (including physicians) to sell or to expose or offer for sale or to give or exchange any patent or proprietary medicine or article containing cocain or any of its salts or alpha- or betaucain, or any synthetic substitute of the aforesaid." Previous to the enactment of this law every Massachusetts druggist sold proprietary preparations containing cocain in some form. Since then the board has prohibited the sale of the following preparations: Crown Catarrh Powder, Dr. Agnew's Catarrh Powder, Dr. Cole's Catarrh Cure, I. C. R. Instant Catarrh Relief, Pretzinger's Catarrh Balm, Allenbury's Throat Pastiles No. 9, Tucker's Specific for Asthma, Hay Fever and all diseases of the respiratory organs.

Finding that many cocain preparations advertised for sale belong to the list of non-proprietary preparations sold without prescription, the board issued an order to the effect that druggists may no longer sell, except on prescription, the following: Compressed Pills, Throat, Mentholated, John Wyeth & Bro., Inc.; Compressed Pill, Nausea, John Wyeth & Bro., Inc.; Anti-Vomiting Tablets, Mulford; Tablets, Anti-Vomiting, No. 2, Mulford; Compressed Tablets, Creosote Compound, No. 2, C. Kilgore, New York.

Later the board advertised as unsalable at retail the following: Standard Catarrh Powder, Reeves' Coca and Tolu Cough Drops, Reeves' Drug and Chemical Company, Cambridge, Mass.; Coca Wine, Ropes Drug Company, Salem; Coca Wine, W. B. Markell's Drug Stores; Coca Wine, Lewis, the Manufacturing Chemist, Boston; Peruvian Wine of Coca, E. F. Mattison, Providence, R. I.; Wine of Coca, Davies, Rose & Co., Boston; Metcalf's Coca Wine, Theodore Metcalf Company, Boston; Dr. Earl's Coca Wine, the New York and Boston Drug Co., Boston; Epstein's Wine of Coca, Epstein's Cut Price Drug Store, Boston.

This work is in the right direction and is commended to the attention of various state boards of health, Indiana included.

THE ILLINOIS STATE MEDICAL SOCIETY has recently entered into an agreement with the American Medical Association by which systematic cooperative organization work will be taken up in Illinois. The plan is as follows: The Membership Department of the American Medical Association has selected the best and most competent men from among its representatives for organization work. These men have had much experience along this line and are thoroughly familiar with all the details of organization work. The work is taken up by counties and councilor districts. Before an organizer is sent into a district, correct proof of the names of the physicians of each county, indicating the members and non-members of the county medical society, is sent to the county secretary, who is asked to revise it and return it to the general office of the American Medical Association. This is done for two reasons: first, that the membership list for that county may be complete and up to date; second, to enable the secretary to designate on the proof those physicians in the county who are not members of their county society, but who are eligible and who would be acceptable to the county society. From this returned proof a list of eligible and desirable non-members is made up, which list is given to the organizer when he starts into the district. At the same time he is given a letter of introduction to the councilor, on whom he calls before taking up the work in the district and with whom he carefully discusses the work in that particular district. The councilor gives him such advice and instructions as he thinks best and also gives him a letter of introduction to each county secretary in the district. The organizer then takes up each county in turn, calling first on the county secretary and

presenting his credentials. The organizer and the county secretary then go over the list of non-members of the county in detail, the secretary giving the organizer such advice in the way of suggestions regarding local conditions, individuals, etc., as he may think advisable. The organizer then calls personally on each desirable non-member in the county, presenting the cause of medical organization and endeavoring to secure the application of the physician for the county society. Applications are taken on a triplicate blank, one copy of which is turned in to the county secretary, the second is sent to the state secretary, and the third to the general secretary of the A. M. A. The organizer, at the time of taking the application, collects one year's dues for the county society, which, of course, includes the state per capita assessment. As soon as the county is completed the organizer reports to the secretary of the county society as to the results obtained. When an entire district is completed a report is made to the councilor of the district. In this way it is anticipated that within the next few months every physician in Illinois who is a non-member of his county society can be personally interviewed, and wherever possible induced to become a member of his county and state organizations.

The advantages of this kind of organization are many, and it is hoped that some such plan can be adopted here in Indiana where there is room for extended organization work. The Council will probably make an effort to secure the cooperation of organizers of the A. M. A., and if suitable arrangements can be perfected the officers of county societies will be requested to give all possible aid and assistance to the organizers sent into this state.

SOCIETY PROCEEDINGS

THE COUNCIL.

A meeting of the Council was held at the Claypool Hotel, Indianapolis, on October 15. The meeting was called to order by Chairman Wishard, with the following Councilors present: Walter J. Leach, Third District, New Albany; W. H. Stemm, Fourth District, North Vernon; Joseph H. Weinstein, Fifth District, Terre Haute; D. W. Stevenson, Sixth District, Richmond; W. N. Wishard, chairman, Seventh District, Indianapolis; George Rowland, Ninth District, Covington; E. G. Blinks, Tenth District, Michigan City; Charles H. McCully, Eleventh District, Logansport; Albert E. Bulson, Jr., Secretary, Twelfth District, Fort Wayne; C. A. Daugherty, Thirteenth District, South Bend. The Secretary presented the proxies and instructions from Councilors W. R. Davidson, First District, Evansville; G. W. H. Kemper, Eighth Dis-

trict, Muncie, and George Knapp, Second District, Vincennes.

The chairman stated that the business of the meeting was to consider the question of the establishment of a medical journal to take the place of the bound "Transactions," and that in compliance with instructions from the House of Delegates the Council had, at a former meeting, appointed the secretary of the Council a committee of one to collect all necessary facts concerning the feasibility of publishing a medical journal to take the place of the bound Transactions, and the wishes of the members of the Association concerning the subject.

The secretary reported that he had sent circular letters to all the county societies in the state asking that a vote be taken on the proposition to establish a journal for the Indiana State Medical Association, and that up to date sixty-three societies had voted for the establishment of a journal and eight had voted to retain the "Transactions," thus indicating that a large majority of the societies were favorable to the establishment of a journal. He also reported that in accordance with instructions from the Council he had carried on an extensive correspondence, concerning state society journals, with officers of various state societies and medical editors interested in state society publications. Much of this correspondence was then read, showing that without exception the state organizations that have established official journals are not only thoroughly satisfied with the results accomplished, but are unwilling to abandon the plan. The secretary then presented considerable tabulated information with reference to the cost of publication of various journals, rates charged for advertising, subscriptions, salaries paid, policies pursued, etc. He also stated that he had secured some preliminary bids on the publication of such a journal as he thought the Indiana State Medical Association ought to publish, and that he had definitely determined the fact that a creditable journal could be published without running the Association into debt or raising the dues.

Following a rather extended and general discussion on the subject, Dr. Stevenson moved that the Council establish a journal for the Indiana State Medical Association to take the place of the bound "Transactions," and that the first number of the journal be published on or about Jan. 1, 1908. The motion was seconded by Dr. Rowland, and on vote was unanimously carried.

Dr. Stevenson moved that Dr. Bulson of Fort Wayne be elected as editor of THE JOURNAL for one year and to continue thereafter as editor until his successor is elected. The motion was seconded by Dr. Daugherty, and on vote carried unanimously.

Dr. Bulson moved that the name of the journal be THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, that it be made a journal of general interest to the medical profession of Indiana, and that it be published under direction of the Council. The motion was seconded by Dr. McCully, and on vote unanimously carried.

Sample copies of several state journals were presented for inspection, and after a free discussion of the subject it was decided, on motion by Dr. McCully, seconded by Dr. Leach, that the new journal be made to correspond in a general way with the size and appearance of the official organ of the Kentucky State Medical Association. Motion carried.

Dr. Bulson stated that as the "Transactions" and the various printing bills for the Association for each

year had cost approximately 75 cents for each member, he thought that such an amount from each member should be voted as an annual subscription to THE JOURNAL, and with the amount raised in this way from subscriptions, added to the amount that could possibly be secured from advertising, he would be willing to undertake the publication of a journal of 48 pages, of the size of the *Kentucky Medical Journal*, each issue to contain 3,000 copies.

Dr. McCully then moved, seconded by Dr. Stevenson, that 75 cents from the 1908 dues of every member of the Indiana State Medical Association be set aside as a subscription to THE JOURNAL for one year, or from Jan. 1, 1908, to Jan. 1, 1909; that such sum be placed to the credit of THE JOURNAL immediately on collection of the dues; and that the members of county medical societies be asked to pay their 1908 dues by January 1 on account of the establishment of a journal and the necessary expenses incurred. Motion carried.

Motion by Dr. Daugherty, and seconded by Dr. Rowland, that the expenses pertaining to the publication of THE JOURNAL, including the salary of the editor, be limited to the income derived from the subscriptions and advertising. Carried.

Dr. Bulson then stated that owing to the demand on his time for regular professional work, he would not be able to look after all the details connected with the proper editing and publishing of the new journal, consequently he would like to have an assistant to share some of the responsibility. Dr. Rowland then moved, seconded by Dr. Stemm, that Dr. Bulson be authorized to select and appoint an assistant editor, and to employ such office help as required, but that all salaries and other expenses connected with the publication of THE JOURNAL be paid from journal funds. Carried.

Moved by Dr. Stevenson, and seconded by Dr. Rowland, that the advertisement of no medicinal preparation be accepted for publication in THE JOURNAL unless it is a U. S. P. or N. F. preparation, or has been approved by the Council on Pharmacy and Chemistry of the American Medical Association. Carried.

Dr. Bulson said that he had the advertising rate cards of various journals, including nearly all of the state society journals, and he suggested that the rates for THE JOURNAL be made to compare favorably with the rates of other state society journals of similar size and circulation.

Moved by Dr. Blinks, and seconded by Dr. McCully, that the advertising rates be made to conform to the rates charged by other state journals and that the rates as established be uniform to any and all advertisers. Carried.

Moved by Dr. Weinstein, and seconded by Dr. Stemm, that THE JOURNAL print no free advertising readers and have no advertising inserts among the regular reading pages. Carried.

Moved by Dr. Daugherty, and seconded by Dr. Stemm, that all original articles for publication in THE JOURNAL shall have the approval of the publication committee of the Council. Carried.

Moved by Dr. Bulson, and seconded by Dr. Weinstein, that the secretary of the Association shall promptly turn over to the treasurer all state society dues, and that the treasurer shall likewise promptly turn over to the editor of THE JOURNAL all subscriptions to THE JOURNAL, so that the funds may be available for the payment of publication expenses. Carried.

Moved by Dr. Stevenson, and seconded by Dr. Daugherty, that the editor be given full authority to adopt any measures and pursue any policy, not already provided for by action of the Council, that in his judgment seems indicated as necessary or appropriate in the best interests of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, and that the Council extend encouragement and support in all his efforts to build up the journal interests. Carried.

Moved by Dr. Stevenson, and seconded by Dr. Rowland, that any candidate for county, state or national office shall be interviewed by the councilor of the district in which such candidate resides, or some one deputized by the councilor, to inquire as to the probable attitude of the candidate on questions vital to the best interest of the medical profession, and that such views be made known to the Council for such publicity as may be deemed advisable or expedient. Carried.

Adjourned.

ALBERT E. BULSON, JR., Sec.

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of Dec. 3, 1907.)

The Society met in regular session in the assembly room of the courthouse, with Vice-President English in the chair and 36 members and a number of guests present. The minutes of the last meeting were read and approved.

Epidemiology of Typhoid Fever was the title of a paper read by Dr. H. O. Bruggeman. He said that typhoid fever is an infectious and contagious disease, and that the immediate rôle of polluted water in the spread of the disease has overshadowed all other sources of infection. Typhoid fever is a general infection, a true septicemia, and hence the bacilli may be excreted by the way of the urine, feces and sputum. The bacilli in the feces come in a large part from the bile. The sputum may be loaded with bacilli and especially is this true if pulmonary complications exist. The theory that intestinal worms play an important part in inoculating typhoid is probably fallacious. Three or four per cent. of the patients who have typhoid continue to excrete the bacilli for long periods of time after recovery. These bacillus carriers are important factors in the spread of the disease, and several epidemics have been traced to such a source. Certain persons who have never had the clinical symptoms of the disease may discharge typhoid bacilli for long periods of time. These individuals are another important source of the spread of typhoid, as are also atypical cases leading to errors in diagnosis. Much study has been given the question of viability and retention of virulency of the bacillus typhosus outside the body. Contradictory results have been obtained, but in general it may be said that direct sunlight rapidly destroys the bacillus, whereas the bacillus, when dried and kept in the dark, lives for many days and is unaffected by freezing and thawing. The bacillus is viable in water from few to many days, depending on the amount of organic material present and the absence of sunlight and other adverse conditions. The organisms may live in the soil for a number of months, and have been known to survive for twenty-three days on the external parts of an ordinary house fly. Every case of typhoid fever is due to the presence of excreta on the food, fingers or other places where excreta should not be found. Contaminated

fingers are a menace both to their owners and the public. Infected bedding and clothing are a source of outbreak in military commands and among laundresses. Rummage sales are another source of infection, and it is now generally recognized that flies may carry the infecting organism directly from the feces to the food. Dust is another possible medium of transfer, and Hurty attributes epidemics to the blowing about of dust containing excreta derived from the toilet rooms of railroad trains. Polluted water is the principal source, not only when used for drinking purposes, but also when used on tooth brushes, as a nasal douche, in the manufacture of soft drinks and even in bathing. Milk probably plays the next most important rôle in the epidemiology of typhoid. Milk may be infected by the contaminated fingers of typhoid nurses, flies and the use of polluted water to wash the milk containers. Milk epidemics affect principally women and children. Oysters and fresh vegetables may also be disseminators of typhoid. The disease is brought about through the medium of food, fingers and flies. Filth is therefore the fundamental condition for the spread of typhoid, and cleanliness the universal panacea for its eradication. One thing is especially clear, and that is that typhoid fever is a contagious disease.

Dr. Van Buskirk opened the discussion by saying that every case of typhoid fever has its origin in another case, and hence the excreta from every typhoid case should be destroyed. The chronic bacilli carriers are a prolific source of the disease. From a bouillon culture of bacillus typhosis poured on the ground in the fall, living organisms have been recovered in the spring from the surface of the ground and also at a depth of eighteen inches. This shows how easily the ground water may be contaminated and from that the drinking supplies. Contaminated water and typhoid feces are the most usual direct sources of infection. The urine may contain the bacilli for years.

Dr. Van Buskirk moved that the paper be referred to the State Medical Association. Motion seconded and carried.

Dr. Buchman said that he knew of an instance in which two members of a family were infected by contaminated water used for dish washing. Every person who ingests typhoid bacilli will not take the disease, as the development of the disease depends on the general state of the system. Intestinal antiseptics in the treatment of the disease are useless because typhoid fever is a systemic disease.

Dr. McOscar said that he believes that the bacilli excreted during an attack of typhoid are more virulent than those excreted after the attack. It was formerly thought that tape worm infection was the one danger in using vegetables fertilized with human feces, but it is now known that vegetables carry typhoid.

Dr. Greenawalt said that he believed that the gall bladder was the source of the bacilli in the "bacilli carriers" in the chronic disseminators of the disease. He thinks that patients should not be discharged until an examination shows the urine and feces clear of typhoid bacilli, and that all cases of typhoid fever should be quarantined.

Dr. Havice said that mild cases of typhoid are dangerous for the reason that such patients do not consider themselves sick enough to go to bed, and oftentimes not sick enough to consult a doctor. He believes that the Board of Health should see that grocery men do not leave food out on the sidewalk to gather dust and germs.

Dr. Nierman said that the only sure prevention of typhoid is to boil all water and cook all food before ingestion.

Dr. Squires said that he believes that there is a great difference in the virulence of the bacillus typhosis, as the severity of epidemics varies greatly. Infection from a virulent case produces a severe attack, and conversely.

Dr. Porter said that the nuclei of many gallstones are typhoid bacilli. He knows of one case of typhoid arising from cistern water used only in bathing and dish washing. Investigation showed a leaking sewer one foot from the cistern. He said that typhoid may occur without fever and abdominal symptoms.

Dr. Drayer said that many cases of typhoid originate from patients having the disease, but not recognized as such. Sporadic cases may be explained on the ground that the germs remain latent in the system until the body resistance becomes low.

Dr. Van Sweringen said that the United States Army Commission demonstrated the important rôle of the fly in the production of typhoid. It is impossible to get a body of men together without having typhoid. He further said that he had obtained the Widal reaction in two cases of tuberculosis and that neither patient had ever had typhoid.

Dr. Rhamy said that he had seen the Widal reaction occur in tuberculosis. He further said that it is the mild and unrecognized cases of typhoid fever which are the ones that do the damage. Bacilli which are not virulent may become virulent when they find a suitable subject. The germs in the chronic disseminator probably come from the gall bladder.

Dr. Bruggeman in closing said that oysters are usually infected in their beds. Mild cases of typhoid are the principal cause of epidemics. One German village epidemic was traced to a woman who had had the disease 42 years before.

Dr. Bulson moved that the secretary invite the government milk expert to deliver a public lecture under the auspices of the Fort Wayne Medical Society. Seconded and carried.

Dr. Porter introduced the following resolution:

Resolved, That the time for paying the annual assessment for the indigent fund be changed to correspond with the time for the payment of the annual dues.

Action postponed until second reading.

The annual election of officers resulted as follows: President, W. D. Calvin; vice-president, C. R. Dancer; secretary, J. C. Wallace; treasurer, W. P. Whery; censor to fill vacancy, H. A. Duemling, delegate to the State Association, H. O. Bruggeman; alternate-delegate, J. B. McEvoy.

Dr. Porter moved that the meeting of December 24 be dispensed with and the program for that evening be taken up later. Seconded and carried.

Adjourned.

CHARLES G. BEALL, *Sec. pro tem.*

(Meeting of Dec. 10, 1907.)

Society called to order at the Fort Wayne Lutheran Hospital (clinic night) by President McEvoy, with 32 members and several guests present. Minutes of previous meeting read and approved.

Pyelitis Accompanied by Severe Bronchitis.—Case report by Dr. Duemling. Patient, man, aged 22, was seen in consultation with Dr. Guy Smith. Patient was found complaining of pain in the chest and the back

(lumbar region) and of a severe cough accompanied by free expectoration of mucus; 24 hours before had had two chills, one following the other. No previous history of any importance. On examination pulse 104, temperature 103, respiration 36. Percussion note same over all areas of the chest; thought to be not as resonant as normal. By auscultation coarse râles in the bronchi, and finer ones in the smaller bronchioles. Percussion in the right hypochondriac region caused the patient to call attention to the pain in the back occasioned by the transmission of the force exerted by the percussion. Found pronounced tenderness over the right kidney. At this point the patient gave a history of having had gonorrhea 15 months before. Examination of the urine showed a specific gravity of 1.033, highly acid, no albumen or sugar, no phosphates but an abundance of urates. Pus cells found by microscopic examination. On the following day the urine showed a larger quantity of pus cells, some staphylococci and a few gonococci. Patient expectorating freely. Three days later the temperature and respiration became practically normal and patient in a fair way for recovery. Dr. Duemling said that the interesting feature of the case was that it seemed to be an ascending infection.

Rupture of the Liver.—Reported by Dr. Duemling. Patient age 70 years, was thrown from a wagon. Not known whether the wagon passed over him or not. Patient found by Dr. Duemling in deep shock, two ribs fractured. Removed to the hospital. On arrival the patient complained of severe pain in the abdomen, was vomiting, restless and very pale. Abdomen distended and tympanitic. An exploratory incision was made and great quantities of blood came into the field. While clearing away the clots pieces of peculiar substance, thought to be fecal matter coming from a ruptured bowel, were discovered, and these, on closer inspection, were found to be pieces of detached liver. Patient died about 24 hours after the injury. The peculiar thing about the case is that the man could live so long with such an extensive rupture of the liver and so little symptoms. In connection with this case Dr. Duemling reported another very similar case of ruptured liver in a young man, with death 6 hours after the injury.

Appendicitis with Resection of the Bowel.—Dr. Duemling reported a case in which numerous attacks of appendicitis had resulted in adhesions and a tumor mass as large as the fist necessitating a resection of two or three inches of the ileum in order to secure satisfactory results from operation.

In this connection Dr. Van Sweringen also presented a specimen of resection of the bowel made necessary from trouble with the appendix. The patient was operated at the end of the first week of an attack of appendicitis. Free pus and a gangrenous appendix were found. Appendix removed and drain inserted. Considerable swelling around the bowel and cecum. Removed the drain at the end of a week. Patient worked during the summer and in the fall attended school for several weeks when he again began to have trouble in the right side. On examination it was found that he had a larger tumor than when he had his appendicitis. The bowel was opened and a tangled mass of bowel and inflammatory material discovered. The bowel was resected and an end-to-end anastomosis made. Recovery uneventful.

Removal of the Thyroid.—Dr. Duemling presented a thyroid tumor which grew as a retro-sternal goiter and was all but hidden behind the sternum. It seemed very small until it was uncovered. The most prominent symptom produced by the goiter was interference with respiration. When the tumor was removed it left a very large cavity which had to be drained. Recovery was uneventful despite the fact that she also had suppurating tuberculous glands of the neck on the left side, which were also removed at the same time.

Dr. Duemling then presented a number of fibroids, several of which had been removed from pregnant women. He suggested that the fibroids grow faster if the patient becomes pregnant.

In the discussion Dr. Porter said that there are several reasons for operating a case of fibromyomata with pregnancy present. Dr. Reed's idea is correct unless miscarriage is liable and then it is not because we have the miscarriage, but on account of the septicemia. Another reason for operating these cases is to save the child, for on removing the tumor and allowing the pregnancy to go on to term the child's chances are better. He said that he had done this in cases fully five months along.

Dr. Porter said that he was not sure that fibroids grow faster on account of pregnancy. The growth of the pregnant uterus pushes the tumor up into the belly and it seems as though the tumor is really growing rapidly.

With reference to the resection case report by Dr. Duemling, Dr. Porter said that he thought it would be advisable to make a microscopical examination of the specimen, as it was not unlikely that the growth might be malignant.

With reference to rupture of the liver, Dr. Porter said that fewer lives would be lost if we could get the profession to realize that so-called "shock" in nineteen out of twenty cases is not shock at all but hemorrhage. If the symptoms do not get rapidly better the thing to do is to open the belly and stop the hemorrhage.

Dr. Rhamy said that in making microscopic examinations for gonococci in the urine it is absolutely necessary to use Grams' stain to differentiate the gonococci from other organisms which look like gonococci.

Dr. B. Van Sweringen exhibited specimens of ovarian cysts prepared by a method which shows the size of the cyst much better than the usual method. He rubs the inside of the cyst with boric acid and stuffs the cyst with cotton. He then rubs the outside with boric and salicylic acid and hangs the cyst up to dry.

Dr. Beall said, concerning the case of hemorrhage from ruptured liver, that it is remarkable that so large a rent should occur without any external mark of violence if the liver was normal. In this case the liver substance seemed to be diseased, as shown by the yellowish pieces taken out by Dr. Duemling, and this diseased condition probably accounts for the extent of the injury.

Dr. English reported a case of rupture of the lung by contre-coup. The patient was struck with a board over the left side ribs to the left of the stomach. There was very little external evidence of injury, but a great deal of shock. There was no evidence of perforation or injury to the abdominal contents or evidence of hemorrhage. Patient died within twenty-four hours, and on postmortem the tissues over the cartilages of the ribs on the left side were found edematous, and on opening the chest, the right lung was found collapsed,

the left one appearing normal. On lifting the right lung, found a tear in the upper and outer posterior half one and one-half inches deep. There was a peritonitis in the upper left portion of the abdomen, but absolutely no hemorrhage.

Motion was made and carried that all clinical cases reported be in writing as far as possible.

Following adjournment the members partook of luncheon served by the hospital management.

Adjourned. J. C. WALLACE, Sec.

(Meeting of Dec. 17, 1907.)

Meeting called to order by President McEvoy with 35 members and a large number of guests present by special invitation. Reading of minutes of previous meeting postponed.

Clean Milk was the title of a stereopticon lecture by Dr. George N. Whitaker, a government dairy inspector. He spoke of the danger in using impure milk and called attention to the fact that milk is frequently a carrier of disease. Tuberculosis may be transmitted to the human being from milk taken from a cow suffering from tuberculosis. It is therefore necessary that all cows suffering from tuberculosis should be excluded from herds. The tuberculin test for tuberculosis in cows is efficient and laws and ordinances should be passed requiring the frequent examination of herds for tuberculosis and other diseases, and when tuberculosis is found in a herd the dairyman should be legally required to remove the diseased cattle from his herd. Milk may be contaminated outside of the cow, and is frequently the carrier of diphtheria, typhoid and scarlet fever. Epidemics of these diseases have frequently been traced to milk. Ordinances should be passed regulating the handling of milk and milk utensils, and there should be absolute cleanliness of water used in washing the pans and pails used to hold the milk. By means of the stereopticon Dr. Whitaker exhibited slides showing dirt in the bottom of bottles containing milk. He also showed numerous pictures of barns where milk cows are kept and pointed out the errors in sanitary arrangements. He also exhibited slides showing barns and milk houses which could be considered entirely sanitary. Attention was called to the various methods and means of keeping dirt from getting into the milk, and he advised that milk be served in bottles and that the bottles be filled under sanitary methods and conditions. All utensils used about milk should be thoroughly boiled. In a city of sufficient size there should be a city milk plant and this should be run under as aseptic conditions as possible. Tables were shown illustrating the increased mortality of bottle fed infants over those fed by the breast. This mortality could be reduced if the milk supplied to infants was of proper quality and free from contamination.

In the discussion Mr. Ellison, a leading dairyman, said that while the milkman is blamed for many shortcomings in the handling of milk, the consumer is also frequently at fault, as very many families give milk but little care after it has been delivered.

Dr. Buchman exhibited a bottle of milk with a great quantity of dirt in the bottom and said that the milk had been served by one milkman but put in a bottle furnished by another milkman. The milk may have been all right but the bottle may not have been clean.

Dr. Schrader said that in a number of cases his patients had expressed themselves in favor of having

milk served in their own containers because the bottles in which their milk had been served were either unclean or there was dirt in the bottles.

Dr. McEvoy said that he has certain knowledge that much of the milk served in bottles is bottled in the street, and of course under such conditions it was impossible to have either the milk or the bottles clean.

Dr. Buchman said that under the new milk ordinance there will be no milk bottled anywhere but in a proper milk house.

Dr. Van Buskirk said that he has been advising consumers to visit the source of the milk supply so as to form a fair sort of opinion as to the conditions under which the milk is furnished.

Mr. Ellison suggested that publicity of opinion regarding dairymen who do insanitary work would go a long way toward improving the sanitary condition of the milk supply of the city.

Dr. Whitaker suggested that the score card system be kept on file in the office of the board of health and the results published in the newspapers. Under this system the dairy inspector reports as to the results found on frequent examination of the various dairies and their product, and the publication of the facts enables the public to know just what dairymen are most rigidly following the requirements of the milk ordinance. This system also has the advantage of pointing out to the dairyman his faults and giving the honest dairyman an opportunity to improve.

Dr. A. S. von Mansfelde, of Ashland, Neb., was then introduced and gave a short talk concerning the work of the commission appointed to investigate the cause of yellow fever. He requested that the Fort Wayne Medical Society pass resolutions endorsing the movement to put bills through Congress for pensions for Mrs. Mabel H. Lazear and Mrs. Jennie Carroll, widows of two doctors who were on the yellow fever commission, and who in the interest of science allowed themselves to be bitten by mosquitoes infected with yellow fever, losing their lives in consequence.

Motion to amend Section 3, Chapter 5, of the by-laws to read that the time for paying the annual assessment for the indigent fund be changed to correspond with the time of payment of the annual dues was then voted on and carried.

Adjourned.

J. C. WALLACE, Sec.

BARTHOLOMEW COUNTY.

The Bartholomew County Medical Society met in regular session Tuesday, December 10, and elected the following officers for the ensuing year: President, Dr. John Little Morris; vice-president, Dr. J. W. Benham; secretary and treasurer, Dr. George T. McCoy; delegate, Dr. R. E. Holder; member of the board of censors, Dr. F. B. Morton. Dr. W. S. Blue was elected a member of the society and the application for membership of Dr. C. W. Potter was received and referred to the board of censors.

GEO. T. MCCOY, Sec.

CLARK COUNTY.

At a recent meeting of the Clark County Medical Society the following officers were elected to serve for the ensuing year: President, Dr. O. P. Graham, Jeffersonville; vice-president, Dr. E. N. Flynn, Jeffersonville; secretary and treasurer, Dr. Austin Funk, Jeffersonville. The society formerly met every month but has recently adopted the postgraduate course of study

and now holds weekly meetings. So far the postgraduate course has proved very successful and the meetings have been well attended.

Adjourned.

AUSTIN FUNK, *Sec.*

CLINTON COUNTY.

The Clinton County Medical Society met December 5, at 8 p. m., and elected the following officers for the ensuing year: President, Dr. George W. Brown; vice-president, Dr. M. F. McCarty; secretary and treasurer, Dr. Charles Chittick. Dr. M. F. Boulden contributed a paper entitled, "Insanity Compared with Borderland and Episodic States." Dr. M. F. McCarty also read a paper on the subject of "The Treatment of Pneumonia."

CHARLES CHITTIK, *Sec.*

DAVIESS COUNTY.

At the meeting of the Daviess County Medical Society on December 5, the following officers were elected: President, Dr. C. H. Yenne; vice-president, Dr. Henry Gers; secretary and treasurer, Dr. T. F. Spink; censor, Dr. Vance May; delegate, Dr. Henry Herr; alternate, Dr. D. B. Smoot.

T. F. SPINK, *Sec.*

DE KALB COUNTY.

At a recent meeting of the De Kalb County Medical Society the following officers were elected: President, Dr. M. E. Klinger, Garrett; first vice-president, Dr. T. G. Matheny, Auburn; second vice-president, Dr. W. F. Shumaker, Butler; secretary and treasurer, Dr. Chas. S. Stewart, Auburn; censors, Dr. J. B. Casebeer, Dr. J. C. Baxter, Dr. W. W. Swarts.

DELAWARE COUNTY.

The Delaware County Medical Society held its annual meeting Friday, December 6, at which time the following officers were elected for the ensuing year: President, Dr. U. G. Poland; vice-president, Dr. A. H. Good; secretary, Dr. H. S. Bowles; censor, Dr. W. W. Wadsworth. Officers holding over: Censors, Dr. P. C. Barnard and Dr. F. E. Hill; delegate, Dr. I. N. Trent.

H. S. BOWLES, *Sec.*

FAYETTE COUNTY.

The Fayette County Medical Society met in regular session Tuesday, December 10, for the election of officers. The following officers were elected: President, Dr. L. D. Dillman; vice-president, Dr. J. H. Clarke; secretary and treasurer, Dr. V. D. Ludwick; censor, Dr. F. J. Spilman. The society has decided to adopt the full four years' postgraduate course of study as outlined by the educational committee of the American Medical Association, and has raised a fund to purchase new books for use in connection with this work.

V. D. LUDWICK, *Sec.*

FULTON COUNTY.

The annual December election of officers for the Fulton County Medical Society resulted as follows: President, Dr. F. C. Dielman, Fulton; vice-president, Dr. A. Johnson, Akron; secretary and treasurer, Dr. M. O. King, Rochester; delegate, Dr. C. L. Slonaker; board of censors, Drs. W. S. Shaffer, C. E. Gould and A. Johnson.

M. O. KING, *Sec.*

HUNTINGTON COUNTY.

The Huntington County Medical Society met in business session December 10, and elected the following officers: President, Dr. F. B. Morgan; vice-president, Dr. E. W. Poinier; secretary and treasurer, Dr. Maurice H. Krebs; board of censors, Dr. Ira E. Perry, Dr. Olive O. Nelson and Dr. Ervin Wright.

MAURICE H. KREBS, *Sec.*

JAY COUNTY.

The Jay County Medical Society held its annual meeting at Portland, December 20, and elected the following officers for the ensuing year: President, Dr. C. C. Mills, Red Key; vice-president, Dr. Grant Chaney, Portland; secretary and treasurer, Dr. M. T. Jay, Portland. The annual banquet followed the business meeting and this was attended by the members and their wives. Dr. M. T. Jay acted as toastmaster and there were responses by Drs. G. W. Shepherd of Red Key, E. C. Garber of Dunkirk, Grant Chaney of Portland, Job Fitzpatrick of Dunkirk, and Mrs. W. D. Schwartz and Miss Nellie McFarland of Portland.

Adjourned.

HARRIET WILEY, *Sec.*

JENNINGS COUNTY.

The Jennings County Medical Society met in regular monthly session Wednesday, December 11. The following officers were elected for the ensuing year: President, Dr. C. C. McFarlin; vice-president, Dr. W. L. Grossman; secretary and treasurer, Dr. W. H. Stemm; board of censors, Drs. D. R. Saunders, W. R. Robertson and W. H. Richardson. The society unanimously voted to take up the postgraduate course.

W. H. STEMM, *Sec.*

JOHNSON COUNTY.

The annual meeting of the Johnson County Medical Society was held December 30, and the following officers elected for the ensuing year: President, Dr. D. S. Phipps, Whiteland; vice-president, Robert Repass, Stones Crossing; secretary and treasurer, J. M. Wallace, Franklin; censors, Drs. R. D. Willan, Trafalgar; D. W. Sheek, Greenwood; J. H. Lanam, Franklin. The society decided to adopt the postgraduate course and begin the regular program at the first meeting in January. Society also voted to meet on the first, second and third Mondays of each month at 2:30 p. m., and that these meetings be devoted to the postgraduate work, and that the meetings on the fourth Monday of each month be devoted to reports of cases as formerly.

J. M. WALLACE, *Sec.*

LAKE COUNTY.

At the regular meeting of the Lake County Medical Society held November 17, the committee on the McCormack meeting reported splendid success. The suggestions of Dr. McCormack as to the post-graduate course of study were discussed and favorably considered. Committees were appointed from each town in the county to arrange weekly meetings for the doctors of their respective communities. One meeting each month for all the doctors of the county is to be devoted to a résumé of the work done by the sub-committees at weekly meetings.

"Infant reeding" was the title of a paper by Dr. Eleanor Scull, which was illustrated by charts and tables for the use of the busy practitioner. It was

shown that cow's milk in various dilutions is the safest and best artificial infant's food where healthy human breast milk is not obtainable.

Dr. Oberlin, who opened the discussion, coincided with the essayist and added a suggestion that barley water be used as a diluent.

Dr. Reiss, formerly deputy milk inspector for the city of Chicago, pointed out the difficulties encountered in securing pure milk and said that unless milk can be secured under sanitary conditions its use is attended with considerable danger. He reported that in his visits to nearly all the dairies in northern Indiana he found a woeful lack of protection against contamination of the milk supply shipped into the cities.

The annual meeting of the Lake County Medical Society was held on December 5. The election of officers resulted as follows: President, Dr. W. F. Howat, Hammond; vice-president, Dr. A. J. Lauer, Whitley; secretary and treasurer, Dr. W. D. Weis, Hammond; delegate to the state association, Dr. G. D. Brannon, Crown Point; board of censors, Dr. E. M. Shanklin, A. J. Lauer and A. A. Ross; committee on legislation, Drs. W. D. Weis, A. G. Schleicher, Thos. Oberlin.

The committee on postgraduate course of study, Dr. Hammond, reported a successful weekly meeting.

At the January meeting of the society a résumé of the work of the various weekly meetings will be given. The subjects will be "Study of Malignant and Benign Tumors" led by Drs. Howat and Groman, and "The Study of the Primary Tissues" led by Dr. Weis.

The president's annual address was delivered by Dr. W. F. Howat. On motion the society directed that the address be printed and a copy sent to every physician in the county.

DR. W. D. WEIS, *Sec.*

LAPORTE COUNTY.

The LaPorte County Medical Society held its annual meeting at the Public Library in Michigan City Friday afternoon, Dec. 13. There was a large representation of the physicians of the county present and a plan of work for the year was laid out which will ensure meetings full of interest. Dr. F. A. McGrew reported a case of retroperitoneal cyst with operation. Dr. J. J. Kerrigan read a paper on "Arteriosclerosis," which was full of practical suggestions. The rational study of drugs was dwelt upon by Dr. V. V. Bacon. The annual election of officers resulted as follows: President, Dr. J. Lucius Gray, LaPorte; vice-president, Dr. B. W. Hollenbeck, Westville; secretary, Dr. J. W. Milligan, Michigan City; treasurer, Dr. E. G. Blinks, Michigan City; censor, Dr. J. N. Ledbetter, Michigan City; delegate, Dr. W. Bowers, Michigan City.

J. W. MILLIGAN, *Sec.*

LAWRENCE COUNTY.

The Lawrence County Medical Society met in regular session Thursday, December 5, at which time the annual election of officers resulted as follows: President, Dr. J. D. Byons, Mitchell, Ind.; vice-president, Dr. E. E. Mitchell, Bedford, Ind.; secretary and treasurer, Dr. Claude Dollens, Avoca, Ind.; censors, Dr. R. B. Short, Bedford, Ind.; Dr. J. A. Givens, Mitchell, and Dr. C. H. Emery, Bedford, Ind.; delegate, Dr. J. T. McFarlin, Williams, Ind.

Dr. R. B. Short read a paper on "Postpartum Hemorrhage," and Dr. C. H. Emery one on "Laryngitis."

CLAUDE DOLLENS, *Sec.*

MARION COUNTY.

INDIANAPOLIS MEDICAL SOCIETY.

(Meeting of Dec. 3, 1907.)

The program consisted of case reports and presentation of specimens.

Mitral Stenosis.—Case report and patient exhibited by Dr. E. C. Thomas. Patient, male, aged 44, machinist. Acute articular rheumatism at the age of 14. First seen in January of the present year. Now shows the following complicated group of signs: Visible throbbing carotids and brachials; visible heave of right ventricle; visible apex beat in sixth intercostal space five inches to the left of the sternum; heaving impulse felt in the third intercostal space to the left of the sternum; sudden, sharp shock at the apex; pulse regular, large and soft; first sound short, sharp and loud; second sound accented at the apex; presystolic murmur loudest just before and merging into the first sound, heard best just to the right of the left nipple. Sphygmographic tracings show sharp but not high up stroke, strong tidal wave, and well-marked diastolic wave. Dr. Thomas believed that there was primary mitral incompetence causing the left ventricular hypertrophy, followed by the present condition of the mitral stenosis. There is a possibility of an aortic incompetence, but he does not believe that this exists.

Opsonic Therapy in Furunculosis.—Dr. T. V. Keene reported having treated seven cases of chronic furunculosis with injections of sterilized cultures from the lesions themselves. In all cases there has been marked improvement, and in some cases entire cure.

Adenofibroma of the Nasopharynx.—Dr. W. F. Clevenger reported the case and exhibited the specimen of an adenofibroma of the nasopharynx with unusual symptoms.

Intestinal Obstruction.—Dr. T. B. Noble reported three cases of intestinal obstruction with operation. Two cases had had previous attacks of unoperated appendicitis within a year. The third case was a healthy boy, aged 18, taken suddenly ill with severe colicky pains while at work in the corn field. All three cases showed the complication of severe colicky pain, abdominal distension and obstinate constipation, with a little temperature. In two cases the operation was delayed for many days because the attending physician did not make a correct diagnosis, and also because a slight movement of the bowels after several days deceived the attending physician into thinking that the obstruction had been relieved. In one case the gut was so gangrenous that it ruptured as soon as it was touched. In the third case an intussusception was found that could not be reduced, and the bowel was resected.

Stones in the Cystic Duct.—Case report by Dr. R. O. McAlexander. Patient, female, aged 33. At the age of 16 had jaundice which persisted for some time, attended with nausea, vomiting, headache and constipation. At 18 she had an attack of hepatic colic which recurred at intervals of two months. At 24 she was operated for gallstones, one hundred stones being removed, but one being left in the cystic duct because it could not be removed. Patient free from gallbladder symptoms for six years, when there was a recurrence of the symptoms, swelling in the line of the incision, spontaneous opening and discharge of mucus, and closure and reopening of the wound a number of times. Patient operated, cholecystotomy being performed. Two stones were found in the cystic duct and

the wall of the gall bladder was found thickened and the organ filled with mucus. The gall bladder was removed and the wound closed without drainage, the patient making a complete recovery.

Umbilical Hernia of Enormous Size.—Case report by Dr. R. O. McAlexander. Patient, female, aged 52. Umbilical hernia developed twenty years ago. Has borne five children since the development of the tumor. The hernia has steadily increased in size until it now measures $33\frac{1}{8}$ inches at the greatest circumference, $28\frac{1}{4}$ inches at the base, and $17\frac{1}{2}$ inches from the base to the apex. The mass is edematous and indurated, and has two ulcers on the surface which have persisted for five years. The hernia contains the omentum and bowel is irreducible. Considered inoperable. Basket-like truss used for a short time, but was not satisfactory. The patient gets about sufficiently to attend to light household duties.

Bronchopneumonia Simulating Appendicitis.—Case report by Dr. A. C. Kimberlin. Patient, male, aged 43, was suddenly seized while at work with an intense pain in the lower abdomen, most severe in the right iliac region. Pulse 120, small and soft, temperature 102, respiration rapid and shallow, seemingly on account of pain. No history of previous cold or cough. First examination of the lungs was negative. Pain was relieved by morphin and the bowels moved freely by castor oil. The next morning the pain was still present, but intensified by deep pressure over the region designated. During the night a severe pain was felt in the region of the right shoulder, and examination disclosed an area of dullness in the front of the right chest, extending up as far as the fourth rib. There were no râles. The breath sounds were diminished, but of normal quality. At the end of the second day a few fine, moist râles could be heard over the dull area. By the evening of the fourth day the whole lower lobe of the right lung showed evidence of consolidation. On the fifth day there was extension to the left lower lobe, but it never became as extensively involved as the right lung. Other parts of the lungs were affected during the course of the illness, which terminated fatally at the end of the third week. The abdominal pain entirely disappeared in about four days, and from that time the course of the illness was that of a rather typical case of bronchopneumonia. The one notable exception in this case, aside from the early abdominal pain, was the entire absence of cough and expectoration. This is the second case of pneumonia he has seen in which abdominal pain was an early and prominent symptom. In the other case a diagnosis of appendicitis was made by the attending physician, and a surgeon was called in to operate, but fortunately discovered the true nature of the illness.

Enlarged Kidney.—Dr. F. L. Truitt reported the case and exhibited the specimen of an enormously enlarged kidney. The exact nature of the lesion was not known, as he had not yet had time to study sections of the organ which are now being prepared.

Discussion.—Dr. T. B. Noble said that he was much interested in Dr. Kimberlin's case, as he had frequently encountered the combination of pulmonary and abdominal disease. He was called in one case where the man, suffering from lobar pneumonia early in convalescence, developed symptoms of acute appendicitis and was operated. The appendix was found distended with a whitish pus, which gave an almost pure culture of the pneumococcus. In view of this relation he

would warn the general practitioner to be very sure that the symptoms in the abdomen are not caused by real disease there.

Dr. Wynn said he had seen cases of pneumonia with marked abdominal symptoms, even simulating typhoid.

He said that he was in doubt as to the real lesion in Dr. Thomas' case. In view of the strong and visible pulsation of the carotids and brachials, the character of the sphygmographic tracings, the hypertrophy of the left ventricle and the location of the murmur, he believed there must be some incompetence of the aortic valve.

Adjourned.

R. H. RITTER, Sec.

(Meeting of Dec. 10, 1907.)

Etiology and Treatment of Hemorrhoids, with Special Reference to Operation by the Ligature Method, Under Local Anesthesia, was the title of a paper by Dr. H. H. Wheeler. He said that the pile tumor is a mixed tumor made up of various proportions of venous dilatation and connective tissue hyperplasia. The first is always primary, but the latter may become so prominent that the tumor becomes almost wholly fibrous tissue. The predisposing causes are sex, habits, occupation, muscular exertion, heredity and anatomic arrangement of hemorrhoid veins. Exciting causes are constipation with attendant straining, disease of the bladder, prostate, urethra, pelvic organs, heart, kidneys, pelvic and abdominal uterine displacements, obstructive hepatic disease, pregnancy, diarrhea and tight lacing. The piles may be internal or external, and they may be thrombotic, varicose, inflammatory or of the connective tissue type. The symptoms include variable pain and discomfort, not dependent on the number or size of the tumors. Palliative treatment is not now considered conservative, and is only used when operation is refused or contraindicated. The operative treatment is the most satisfactory to the patient and the doctor, especially since the introduction of infiltration anesthesia. The greatest objections to the older methods of operation are the necessity of a general anesthetic and the loss of time to the patient. In most uncomplicated cases this is unnecessary if they are operable under local anesthesia, which gives very little pain and discomfort and a very short interruption from the daily business of the patient. Hemorrhoids can be safely and radically relieved by operation under local anesthesia if the operator is a thorough master of the principles and technique of infiltration anesthesia.

Before operation the patient should be thoroughly examined to exclude the possibility of complication, as well as to accurately locate the tumors. The bowels should be thoroughly cleaned the day before the operation. If the sphincter muscle is found contracted it may be anesthetized and dilated by injecting it with a 2 per cent. solution of cocaine at the distribution of the lesser splanchnic nerve. One-eighth per cent. solution of cocaine is injected into the center of the pile tumor until the tumor turns glassy white. The pain is slight and is relieved as soon as the dissection is begun and the tension is relieved. The mass is grasped with a forcep and is dissected up until it is attached by a narrow pedicle, which is ligated with silk or linen and the mass cut off. Skin tabs are injected and cut off the same way. The bowels are moved on the second day following the operation and every day thereafter. The author gives a saline before breakfast, and when the

impulse is felt, eight ounces of olive oil are injected. After the movements the parts are cleansed and one ounce of olive oil with one dram of iodoform is injected into the rectum. The anal region is kept clean, and as soon as the ligatures have come away 15 per cent. ichthyol in castor oil, or 4 per cent. silver nitrate solution is applied to the granulating surface until healing is complete.

Discussion.—Dr. Goethe Link said that most people that would consent to any kind of an operation preferred a general anesthetic. He believed that the dilatation of the sphincter is perhaps the most important part of the operation. This can be done under cocaine anesthesia, but it requires considerable needling and quite a quantity of the drug, both of which are made more dangerous by the nature of the region. The addition of adrenalin is of advantage, as it contracts the blood vessels and retains the cocaine in the tissue into which it is actually injected, and thus lessens the amount necessary and the danger of absorption. The weakest possible solutions of cocaine should be used, as the abundant vascular supply makes absorption very easy. While the operation under local anesthesia can be done, it is not yet wholly satisfactory.

Dr. A. B. Graham said that ligation of piles is one of the oldest operations on record. The clamp and cautery method was introduced about the middle of the last century. The question as to the superiority of either one of these operations has been debated ever since, and the advocates of either method claim exactly the same advantages and merits. Neither operation is very difficult, and both are satisfactory if done with care. Dr. Graham said that he has tried the plan of removing hemorrhoids under local anesthesia, following the method of Gant, but his experience has been very unsatisfactory, and he is now most emphatically opposed to it. He believed it is impossible to thoroughly divulse the sphincter under local anesthesia, and the injection of solutions into the pile mass is very painful. Pain is only present when the pile tumor protrudes into the lumen of the rectum, descends and is grasped by the sphincter. The confining of patients to bed for some time after the operation is the safest plan, as there is always danger of hemorrhage until the ligatures have come away, and even after that bleeding has been known to occur. Allowing the patient to be up and attending to his business in a few hours or days is fraught with positive danger. Furthermore, a patient with an ulcerated rectum should be in bed, and every effort made to stimulate rapid healing with a minimum amount of scar tissue. It is a significant fact that when doctors themselves are operated on they always want a general anesthetic.

Dr. G. W. Combs said that the two chief drawbacks to doing this operation under local anesthesia were the interference with doing perfect work because of the constant fear of pain to the patient and the difficulty in securing complete dilatation of the sphincter. There are many objections to local anesthesia. Moreover, it is not safe to let patients up soon after the operation, as it requires a certain length of time for the rectum to return to its normal condition.

Dr. F. R. Charlton called attention to the powerful effect of stretching the sphincter. It is one of the methods used to restore a patient in anesthetic accidents, the profound stupor of opium poisoning, etc. He can not understand how this procedure can be successfully carried out under local anesthesia without producing pain or shock or both.

Dr. G. J. Cook said that the old and still commonly taught idea that an external pile may be an extravasation of blood is a mistake. A true external pile is always a dilated blood vessel that suddenly becomes thrombosed. In nearly every case it is also infected. He has had an extensive experience with local anesthesia, having done appendectomies, cholecystotomies and other major operations under it. He has never tried to divulse the sphincter under local anesthesia because the quantity of the drug necessary for anesthesia is dangerous and the muscle can only be thoroughly deadened by extensive needling. He has never tried to remove piles under local anesthesia and is strongly opposed to it. He has seen and heard Gant, and believes that much of Gant's success is due to marvelous manual dexterity. He does not believe that Gant removes the whole tumor mass, and will only be convinced of the thoroughness of the work when a number of patients have been followed up for four or five years and carefully examined to see that there has been no recurrence of the piles. Except in the rare cases of complete prolapse of the pile tumor, after the sphincter is stretched, the pile must be seized with a forceps and forcibly pulled down. This of itself would be a painful proceeding, but is absolutely necessary if the whole mass is to be exposed and gotten rid of. It is for this reason, if for no other, that he doubts if the operation can be thoroughly done by Gant or anyone else under local anesthesia. It is a simple matter to remove simply the upper or superficial part of the pile, but that is really of very little value. It is the rule, founded on good reason, to confine the patient to bed for some time after an operation under general anesthesia, and he can see no reason why it is any more proper to allow patients up sooner when local anesthesia has been used. This tissue does not heal kindly or quickly, and in the upright position the whole weight of the column of blood in the portal system is thrown on the lacerated area. He believes in limiting the diet of the patient after the operation and not moving the bowels until the fourth or fifth day. This promotes rapid healing. The next day after the operation his patients are given an injection of aristol in olive oil, and this is repeated every day until healing is complete. He does not use silver nitrate until the sixth or eighth day, and only then if the ulcer seems sluggish and needs stimulation.

Dr. T. B. Eastman said that he was impressed with the extent to which surgeons will go to avoid the use of a general anesthetic. The danger of a general anesthetic is of course too real to be neglected, but if more care were taken and more skilled anesthetists engaged the danger would be exceedingly slight. He has tried the various injection methods, but has found them all unsatisfactory, and believes the danger absolutely less with skillfully given ether than cocaine infiltration.

Dr. Wheeler, in closing, adhered to his contention that piles can be removed and removed thoroughly and the sphincter divulsed under local anesthesia, although the latter is not always satisfactory. Injection of cocaine into the sphincter is not difficult nor necessarily painful. He does not believe that it is necessary to confine patients to bed as long as usual after this operation unless there is some complication. He believes that locking up the bowels for four or five days favors general infection, and earlier moving with thorough washing of the site of operation is far preferable. Pain after the use of local anesthesia is

no more constant or severe than after the use of a general anesthetic. Patients should be operated at home or in a hospital, and only under exceptional circumstances at the office.

Adjourned.

R. H. RITTER, Sec.

(Meeting of Dec. 17, 1907.)

The Society was called to order in the clinical amphitheater of the City Hospital by the President, Dr. Pfaff. The minutes of the last meeting were approved without reading. A communication was read from Demarcus Brown, the State Librarian, calling attention to the fact that a list of foreign medical journals had been ordered for the State Library and others would be ordered as the funds permitted. The secretary-treasurer called attention to the request for the payment of dues for 1908 now instead of postponing it until the first of the new year. This request was made because of the establishment of a journal by the State Medical Association and the need for funds immediately.

Disseminated Keratitis.—Case report by Dr. J. O. Stillson. This was a child with disseminated keratitis from hereditary syphilis. The iris was prolapsed forward and adherent to the cornea, a condition called *leucoma adhaerens*. He discussed the various forms of keratitis and laid special stress on the distinction between inflammations of the external layer of the cornea, due usually to acute infections and trauma, and inflammations of the posterior layer due usually to constitutional diseases. He referred to the treatment of inflammations of the cornea, warning against the unnecessary use of silver and other caustics. Cocain should be used cautiously, and only under exceptional circumstances given to the patient.

Tertiary Syphilis.—Dr. A. W. Brayton presented three cases.

CASE 1.—Patient, male, aged 40, a bartender and a very heavy drinker. Two years ago he became infected with syphilis. Gives a clear history of secondary lesions and has had only indifferent treatment. Four months ago he began to have trouble with his teeth; they became loose and were extracted by a dentist. This was followed by extensive inflammation and necrosis of the maxilla. Six weeks ago the nose became red and swollen and a discharge appeared. There has taken place extensive destruction of the nasal bones and flattening of that organ. The interesting feature of this case is the early appearance and rapid progress of the tertiary lesions.

CASE 2.—A woman, aged 24. History of enlargement of the cervical glands in childhood. Six months ago there appeared a small papule on the ala of the nose. This changed to a blister, became pustular and was soon followed by other similar lesions. Some of them healed up entirely, leaving scars, but others have remained unhealed for the entire period. The differential diagnosis is between lupus, acne rosacea and syphilis. The lesion at first examination is a very indefinite one, but a careful questioning brings out a history of a primary lesion two years ago, followed by distinct secondaries, and now at this early date by tertiary lesions.

CASE 3.—Woman, aged 23. Scattered over the entire body are numerous flat, scaly, squamous syphilides which have been present for about three weeks. This eruption might easily be confused with seborrheic eczema or psoriasis.

Brain Softening from Arteriosclerosis.—Dr. F. B. Wynn gave the following history of the case from which the brain exhibited came. Several months ago a woman became suddenly hemiplegic, with no loss of consciousness. There was complete aphasia, not amnesia, but no paralysis of the muscles of the lips, tongue or pharynx. There was no improvement after several months, the fingers contracting and the joints becoming rigid. A provisional diagnosis of hemorrhage into the internal capsule was made at this time. Two days before her death she developed tonic convulsions, beginning on the paralyzed side, and became unconscious. The brain was exhibited by Dr. J. V. Reed, who explained that on opening the dura there was distinct bulging, and a quantity of fluid escaped. The left hemisphere was depressed and flattened; the pia and arachnoid over this side were thickened and opaque. The membranes at the base were thickened, but there was no evidence of tubercles. There was softening of the parenchyma, most marked in the Rolandic area, and the posterior portion of the frontal lobe on the left side. There was no evidence of recent or old hemorrhage. The basilar artery was nodular and the Sylvian artery stiff and hard with thickened walls. There was no thrombus found. The cause of the symptoms was evidently chronic softening from arteriosclerosis.

Acute Meningitis, Cirrhosis of Liver and Other Complications.—Case report by Dr. F. B. Wynn. Patient female, aged 46. One sister died of tuberculosis. Six months ago she began to have slight dyspnea, general indefinite pains and malaise. Two months ago the ankles became edematous, and in a few weeks she became aware of fluid in the abdomen. For the last three weeks of her life she had a persistent diarrhea. She complained of headache, dyspnea, dizziness and progressive loss of strength. For the last four months there was an elevation of temperature every day, varying somewhat, never going very high. An occasional murmur could be heard over the heart, but this disappeared shortly before her death. She died of an acute meningitis. The autopsy revealed an advanced stage of a typical atrophic cirrhosis of the liver. The diagnosis before death was tubercular peritonitis. The liver was demonstrated by Dr. R. H. Ritter.

Atheromatous Degeneration of Heart.—Dr. E. S. Knox exhibited the heart of a patient who had died in the hospital in the course of an operation for the removal of a cystic thyroid gland. The patient was 56 years old and gave a history of alcoholism and syphilis. The ether had been discontinued and the wound was being dressed, when he suddenly died. Autopsy revealed extensive atheroma of the mitral and aortic valves and aorta, with atheromatous ulcers in the latter. The left ventricle was hypertrophied and the coronaries markedly sclerotic in patches. In the left coronary was found an occluding thrombus. There was right hydrothorax with diaphragmatic pleurisy.

Adjourned.

R. H. RITTER, Sec.

PIKE COUNTY.

At the regular December meeting of the Pike County Medical Society the following officers were elected for the ensuing year: President, Dr. William M. Hunter; vice-president, Dr. W. J. Bethel; secretary and treasurer, Dr. E. S. Imel. Dr. T. Rice read a paper on "Fracture of the Frontal Bone of the Skull," and presented a clinical case history showing complete recovery

following the removal of several spicules of bone and some brain substance. The paper was discussed by various members. Drs. Coleman, Hunter, Kime and Abbott reported cases of scalp and skull injuries.

E. S. IMEL, *Sec.*

PUTNAM COUNTY.

The Putnam County Medical Society met in business session December 10, the election of officers resulting as follows: President, Dr. Walter M. Gaughey; vice-president, Dr. Chas. Sudrauski; secretary, Dr. J. V. Bastin; treasurer, Dr. L. M. Hanna. After much discussion it was decided to take up the postgraduate course for 1908. During 1907 the following members were admitted to the society: Drs. Zarin, Wright, Culphier and Moser.

J. V. BASTIN, *Sec.*

RANDOLPH COUNTY.

At the regular monthly meeting of the Randolph County Medical Society, Tuesday afternoon, December 10, the following officers were elected for 1908: President, Dr. W. W. Root, Parker City, Ind.; vice-president, Dr. J. E. Nixon, Ridgville, Ind.; secretary and treasurer, Dr. Chas. L. Botkin, Farmland, Ind.; censor (three years) Dr. J. H. Maroney, Winchester, Ind. Dr. G. C. Markle, Winchester, read one of the most interesting papers ever presented before this society, his subject being, "Advantages of the County Medical Society." By unanimous vote of the society the paper was referred to THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION for publication.

CHAS. L. BOTKIN, *Sec.*

RIPLEY COUNTY.

The Ripley County Medical Society met in regular session Tuesday, December 3, and elected the following officers for the ensuing year: President, Dr. J. R. Pate, Milan; vice-president, Dr. L. T. Cox, Napoleon; secretary, Dr. M. J. Coomes, Batesville; treasurer, Dr. R. F. Olmstead, Versailles. An interesting case of typhoid perforation, with recovery, was reported by Dr. Pate, and the report was followed by an interesting discussion.

M. J. COOMES, *Sec.*

RUSH COUNTY.

The Rush County Medical Society met on Monday, December 9, and the following officers were elected for the coming year: President, Dr. W. S. Coleman; vice-president, Dr. F. H. Green; secretary and treasurer, Dr. L. M. Green; delegate, Dr. C. H. Parsons; censors, Dr. D. D. VanOsdol, R. T. Blount and J. C. Sexton.

L. M. GREEN, *Sec.*

SCOTT COUNTY.

The Scott County Medical Society held its annual meeting at Scottsburg, Ind., on December 9, and elected the following officers: President, Dr. Thomas H. Close; vice-president, Dr. W. L. McClain; secretary and treasurer, Dr. T. E. Biery; censors, Drs. O. C. Murphy, George H. Cline and A. J. Sarver. Dr. Biery reported an interesting case of broncho-pneumonia, complicated by meningeal inflammation, resulting in death. The symptoms started with vomiting, followed by high temperature, dilated pupils, spastic contraction of the muscles of the face, and later convulsions.

The next meeting of the society will be held on January 14, when Dr. J. N. Hurty, secretary of the

State Board of Health, will give a demonstration of the new antitoxin and a lecture on tuberculosis and its prevention.

Adjourned.

T. B. BIERY, *Sec.*

SPENCER COUNTY.

The Spencer County Medical Society met at Christney December 17. Election of officers resulted as follows: President, Dr. S. W. Stuteville, Grandview; vice-president, Dr. S. P. Gwaltney, Christney; secretary, Dr. H. I. White, Grandview. An excellent talk on Mastoiditis was given by Dr. W. M. Griffith, President of the Kentucky State Medical Association.

Adjourned.

EVA J. BUXTON, *Sec.*

STEBEN COUNTY.

The Steuben County Medical Society met in regular session at the Court House in Angola Friday, December 13. Dr. J. F. Cameron reported a case of glaucoma, and one of appendicitis with probable tubo-ovarian complication. Dr. Mary T. Ritter reported a case of ectopic gestation, showing upon operation a fetus of twelve to fourteen weeks' development, in which case there were no signs of internal hemorrhage before operation. The cases were discussed by various members of the society. The subject for general discussion was Pulmonary Tuberculosis and the discussion was opened by Dr. J. F. Cameron, followed by Drs. O. H. Swantusch and H. D. Wood. During the October, November and December meetings the following new members have been added to the society: Drs. Nichols, Dunkel, Wade, Lake, McFarland, Cunningham, Dando and Lawrence. The following officers have been elected for 1908: President, Dr. H. D. Wood; vice-president, Dr. O. H. Swantusch; secretary and treasurer, Dr. Mary T. Ritter; delegate, Dr. J. F. Cameron; board of censors, Drs. F. B. Humphreys, T. J. Creel, P. N. Sutherland.

MARY T. RITTER, *Sec.*

ST. JOSEPH COUNTY.

The annual election of officers of the St. Joseph County Medical Society took place on Tuesday, December 17, the following officers being elected: President, Dr. C. E. Hansel; vice-president, Dr. Walter Peck; treasurer, Dr. J. W. Hill; secretary, Dr. Charles Rosenbury; censor, Dr. H. T. Montgomery; delegate, Dr. R. B. Dugdale. The society voted unanimously to take up the postgraduate course of study and changed their time of meeting to every Monday evening for that purpose. Dr. W. A. Pusey held a clinic on diseases of the skin, November 20, which was well attended.

CHAS. ROSENURY, *Sec.*

TIPPECANOE COUNTY.

At the annual meeting of the Tippecanoe County Medical Society held December 23, the election of officers resulted as follows: President, Dr. Frank M. Biddle, Battle Ground; vice-president, Dr. Adam W. Shrieber, Lafayette; treasurer, Dr. Chas. Hupe, Lafayette; secretary, Dr. W. M. Reser, Lafayette; censor to fill vacancy, Dr. G. F. Beasley, Lafayette; delegate, Dr. W. R. Moffit, West Lafayette.

"Some Preventable Causes of Degeneracy" was the title of a very interesting paper presented by Dr. R. S. Cunningham. The paper was freely discussed.

W. M. RESER, *Sec.*

VERMILION COUNTY.

At the annual meeting of the Vermilion County Medical Society the following officers were elected: President, Dr. M. L. Hall, Newport; vice-president, Dr. W. P. Darroch, Cayuga; secretary and treasurer, Dr. O. M. Keyes, Dana; censors, Drs. Casebeer (Newport), Newhouse (Hillsdale), and Newton, (St. Vernice); delegate, W. P. Darroch.

Adjourned. O. M. KEYES, *Sec.*

WABASH COUNTY.

The annual election of officers of the Wabash County Medical Society took place on November 20, and resulted in the election of the following: President, Dr. Loren W. Smith; vice-president, Dr. G. M. LaSelle; secretary and treasurer, Dr. Laurence E. Jewett; board of censors, Drs. Z. M. Beaman, North Manchester; C. L. Dickens, LaFontaine; C. F. Fleming, Wabash.

The Wabash County Medical Society was entertained on Wednesday, December 18, by the newly elected president, Dr. Lorin W. Smith, and had as honor guests, Drs. J. Rilus Eastman of Indianapolis; J. C. McDonald, of Warsaw; and Chas. H. McCully, of Logansport. After a banquet formal talks were made by Dr. Eastman and Dr. McCully, the former telling much of interest concerning his recent trip abroad, and the latter speaking on the subject of medical organization. Dr. McDonald presented an interesting case of Friedrich's ataxia. A committee was appointed to investigate the work of the postgraduate system and report at the regular meeting in January.

L. E. JEWETT, *Sec.*

TWELFTH COUNCILOR DISTRICT MEDICAL SOCIETY.

That the district medical society is destined to become no mean factor in the promotion of the plan of medical organization of our state was well demonstrated at the last meeting of the Twelfth Councilor District Medical Society, held in Fort Wayne, October 29. In point of attendance it was remarked to resemble more a state than a district meeting, the registered attendance being 210 members, and many visitors. By a fortunate arrangement of dates the attending members were enabled to avail themselves of an opportunity to hear two splendid talks by Dr. McCormack on the day previous, the afternoon one to doctors only and in the evening to the public. No pains were taken by Dr. McCormack to spare the physicians just criticism at either meeting, and yet the genial but sincere way in which both public and physician were taken into his confidence was a real satisfaction to all who were fortunate enough to hear the secretary of the Committee on Organization of the American Medical Association.

The program carried out at the District Society meeting was as follows:

TUESDAY FORENOON.

Neurological clinic at St. Joseph's Hospital, conducted by Dr. Hugh T. Patrick of Chicago and Dr. G. W. McCaskey of Fort Wayne.

TUESDAY AFTERNOON.

1. A New Method of Treatment of Trifacial Neuralgia Dr. Hugh T. Patrick, Chicago
2. Diagnosis of Organic Brain Disease.....
- Dr. G. W. McCaskey, Fort Wayne
3. Leukemia Dr. S. D. Mentzer, Monroeville
4. Movable Kidney
- Dr. Frederick Charlton, Indianapolis
5. Some Surgical Aspects of the Thyroid Gland....
- Dr. Edward J. McOscar, Fort Wayne

TUESDAY EVENING.

1. Spina Bifida..... Dr. Miles F. Porter, Fort Wayne
2. Extrauterine Pregnancy
- Dr. B. VanSweringen, Fort Wayne
3. Brain Tumors (Case Report).....
- Dr. K. K. Wheelock, Fort Wayne

The officers of the Twelfth Councilor District Medical Society are:

President..... S. H. Havice, Fort Wayne.
 First Vice-President... D. W. Dryer, LaGrange.
 Second Vice-President. J. S. Boyers, Decatur.
 Secretary..... E. M. Van Buskirk, Fort Wayne.
 Treasurer..... D. C. Wyhorn, Sheldon.

E. M. VAN BUSKIRK, *Sec.*

BOOK REVIEWS

MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. By Charles H. May, M.D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York, 1890-1903. Fifth edition, revised. With 362 original illustrations, including 22 plates with 62 colored figures. New York: William Wood & Co., 1907.

This is a remarkably comprehensive text-book for such a relatively small volume. Its popularity is attested by the demand for five editions and the translation of the work into five foreign languages. The author has succeeded admirably in carrying out his plan to say enough but not too much, and the restriction in size has been accomplished by omitting excessive detail, extensive discussion, and lengthy accounts of theories and rare conditions. Uncommon affections, of interest chiefly to the specialist, have been dismissed with a few lines; common diseases, which the general practitioner is most frequently called upon to treat, have been described with comparative fulness. Many excellent illustrations, not a few in colors, aid in elucidating the text, and a thorough and painstaking revision of this last edition makes the book up to date in all particulars.

THE LIFE OF NATHAN SMITH DAVIS, A.M., M.D., LL.D., 1817-1904. By I. N. Danforth, A.M., M.D., Chicago. Cleveland Press, 1907.

This little tribute to the memory of the "Father of the American Medical Association" is an inspiration to every student of medical biography. Within the limits of so small a volume, full justice to such versatility of character is out of the question, but throughout its pages and between its lines is written the story of what can be accomplished by honesty, industry and unity of purpose. From the time of his pledge to his dying mother, when but 7 years of age, to his death at the ripe age of 87, this master workman was true to his vow to "do good to his fellow-men."

In this day of specialism in medicine one is led to wonder, upon perusing the record of all that was accomplished by this broad-minded man, whether or not one day the pendulum will not swing back toward Dr. Davis' ideal, that of general practice in the broadest acceptance of the term. Certain it is that his universal fee of \$1 would hardly meet our present conception of justice either to ourselves or our patients, and it is possible that had he lived and worked on in the interests of higher medical education, a subject so dear to his heart, he would have admitted an inconsistency in such a stand.

So much does the profession owe to Dr. Davis that its sincerest gratitude is due the author for this short memoir.

MANUAL OF HYGIENE AND SANITATION. By Seneea Egbert, A.M., M.D., Professor of Hygiene and Dean of the Medico-Chirurgical College of Philadelphia, etc. Fourth edition, enlarged and thoroughly revised. Illustrated with 93 engravings. Pp. 498. Philadelphia and New York: Lea Brothers & Co., 1907.

In this new edition of what must, of necessity, be but a brief résumé of the important science of hygiene, there have been added several pages on the theory of opsonins, the latest U. S. regulations regarding quarantine and disinfection, and notes on improved methods of sewage disposal. Likewise the important study of vital statistics has been made to include the latest U. S. Census Bureau reports. In outlining the duty of the physician in preventive medicine, the pertinent remark is made in the introduction that unworthy the name of physician is he whose sole and primary object is to make money. A brief but interesting chapter on bacteriology is followed by a review of the salient hygienic points concerning atmospheric air, an excellent résumé of questions of ventilation and heating, water, food, personal hygiene, disinfection, quarantine, sewage, etc. Exception might be taken to the rather high antiseptic value accorded peroxid of hydrogen. The book concludes with a condensed consideration of the subjects of military hygiene, vital statistics and suggestions on the examination of food, water and air.

In the abridgement of so broad a subject, statistics must be largely sacrificed to concise statements of more general facts, and in this work the condensation has been well done.

DISEASES OF THE GENITOURINARY ORGANS AND THE KIDNEY. By Robert H. Greene, M.D., and Harlow Brooks, M.D. Octavo of 536 pages, profusely illustrated. Cloth, \$5.00 net; half morocco, \$6.50 net. Philadelphia and London: W. B. Saunders Company, 1907.

This work is systematically arranged and much space is given to careful examination and diagnosis. The authors, one a genitourinary surgeon and the other a pathologist, have given much consideration to general questions in their relation to genitourinary conditions. The methods of examination and the operations found most practical with the authors are described in detail.

The chapters dealing with embryology, physiology and pathology of the kidney and the discussion of blood pressure and compensation in kidney diseases are especially interesting. The treatment of Bright's disease is presented in a thorough manner. Much stress is placed on careful diagnosis in tuberculosis of the kidney. In the treatment of tuberculosis of the kidney the use of drugs is discouraged, and the results ob-

tained from the use of tuberculin have not been encouraging.

The result of much original work on the pathology of the hypertrophied prostate is given. Two methods of operation for prostatectomy are described, namely, the intra-urethral removal of the prostate through a perineal incision, and suprapubic prostatectomy.

The volume is adequately illustrated and designed to be of practical value to the general practitioner.

THE COMMONER DISEASES OF THE EYE. How to Detect and How to Treat Them. By Casey A. Wood, M.D., C.M., D.C.L. For Students of Medicine. With 280 illustrations (many original) and 8 colored plates. Third edition, enlarged and improved, with index. Cloth, 600 pages, \$2.50. Chicago: W. T. Keener & Co., 1907.

A more appropriate title for a text-book on ophthalmology, intended primarily for the student and the physician in general practice, could not have been selected, and the authors have succeeded in producing a work that is unsurpassed for the purpose intended. It is practical from the fact that it is as near as possible devoid of technicality and sufficiently comprehensive in the consideration of those diseases which are more commonly met with by the average practitioner of medicine. The point is well taken by the authors that many of the commoner diseases of the eye whose signs and symptoms are often overlooked or misinterpreted, go on, in the ordinary course of events, either to a more or less rapid destruction of the organ itself, or to considerable impairment of its function, and it is the duty of every practitioner of medicine to recognize these conditions and place a proper interpretation upon them. This can be done by the exercise of the same quality and amount of care and intelligence which are commonly brought to the investigation of diseases of the lungs, uterus, or any other organs. The authors have therefore considered ophthalmology from the standpoint of the physician in general practice and produced a text-book which is peculiarly adapted to the needs of students and general practitioners. Numerous illustrations, synopsis headings, and a complete reference index aid in popularizing the work. The present edition has been thoroughly revised and several new chapters added. The importance of the relationship of nasal and neighboring cavity affections in diseases of the eye has but recently been recognized, and a special chapter has been devoted to this interesting subject. A few colored illustrations could profitably be used to elucidate the text, but lack of these is fully compensated for by the clearness and completeness with which each subject has been handled.

TREATMENT OF DISEASES OF CHILDREN. By Charles Gilmore Kerley, M.D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Pp., 597. Cloth, Price, \$5.00. Philadelphia: W. B. Saunders & Company.

Under this title is presented a most thorough work devoted to the treatment of diseases of children. The work fills a long felt want in that details of treatment are given great prominence, practically nothing being left to the imagination, and, as the author says in his introductory chapter, such ambiguous terms as "supportive treatment," "free stimulation," etc., are avoided, and in their place definite directions are given.

The first chapter is devoted to general considerations and contains much common sense advice pertaining to the general care of the infant and his personal hygiene. The author lays great stress on the necessity for intelligent co-operation on the part of those in charge of the child, without which, successful treatment is impossible. In the second chapter are considered the new-born, premature, and congenitally weak infant, asphyxia, sepsis, icterus neonatorum, atelectasis, hemorrhagic diseases, tetanus, etc. The third chapter deals with nutrition and growth, and in this chapter is given the most concise and direct explanation of the theory and practice of infant feeding that we have read, the subject being reduced to such simple terms as to come within the ready comprehension of even the lay reader. The next chapter deals with gastroenteric diseases; attention being directed to the fact, often overlooked, that most of the acute cases are preceded by disturbance of the process of intestinal digestion and are therefore not as acute as is generally supposed. The author then takes up the various diseases of the tract, giving to each the same careful attention to details of treatment that characterize the entire work. A special chapter is devoted to diseases of the mouth, throat and nose, then the diseases of the respiratory tract, heart, contagious diseases, the urine, the male genitals, the female genitals, nervous disorders, syphilis, deformities, diseases of the skin, diseases of the ear, glandular diseases, heredity and environment, constitutional disorders, infectious fevers, temperature in children, vaccination, instructions for the summer, therapeutic measures, gymnastic therapeutics, and lastly a chapter on drugs and drug dosage are given in the order named. The descriptions of various mechanical measures necessary in the treatment of infants and children are made plain by frequent illustrations. Formulas found useful in the author's experience are given. The chapter on gymnastic therapeutics is well illustrated, and is a distinct addition to a work on this subject.

Altogether, we feel that the book is destined to be of great value to the army of men engaged in general practice, for whom it is intended.

ABSTRACTS FROM CURRENT MEDICAL LITERATURE

THE PHYSICIAN AND PROPRIETARY REMEDIES.

Admitting that a proprietary remedy, the formula of which is known, and that may be a useful remedy, can be ethically prescribed by a physician, there can be no possible excuse, H. W. Wiley, Washington, D. C., says (*Journal American Medical Association*, November 9), for a physician prescribing under fancy or assumed names ordinary remedies, the existence of which in the compound is unknown to him. Nor should any physician at the present time allow his name to be used for the recommendation of any proprietary remedy of known composition, no matter how well he may think of it. It is not his proper function to stand as sponsor for a preparation, the profits of the sale of which must accrue to one or a few proprietors. Many instances of the misuse of physicians' names have come under Dr. Wiley's observation in connection with the study of adulterated drugs in the execution of the Food and Drugs Act of June 30, 1906. Still more

humiliating is the direct connection of medical men with medicinal remedies that are sometimes of the most worthless type. The worst of all is the connection of members of the profession with so-called opium, morphin and liquor cures. Most of these are originated and carried on largely for profit, for the money instead of the welfare of the unfortunate victims. There should be such an ethical spirit developed as would make it impossible for any member of the American Medical Association to commit offences of the character here condemned. A number of illustrative instances are given, without the use of names, of the evil practices referred to.

THE UNCERTAINTY OF THE OPSONIC INDEX.

On the evening of October 10, Dr. Richard Clarke Cabot, of the Medical Faculty of Harvard University, and author of three notable text-books on diagnosis, made an address before the Sangamon County Medical Society which was pregnant with practical suggestions and tempered with the soundest of good sense. . . . During the evening a question was put to Dr. Cabot as to the exact significance of "opsonins" and the "opsonic index," which are to-day filling the pages of medical journals and agitating physicians. The distinguished guest had devoted considerable study to opsonins and started his remarks with a bland smile and a manner which was not indicative of great enthusiasm. Explaining the theory briefly, yet in a manner which made it clearer to those present than the weighty dissertations of essayists could ever have done, he pointed out the technicalities and difficulties which, at the present time, at least, render opsonic work entirely impracticable for the physician in practice.

Dr. Cabot then recalled the visit of Wright, the eminent exponent of the theory of opsonins, to the United States, and the rather disconcerting incident of his pilgrimage to the Massachusetts Consumptive Sanatorium at Saranac Lake, to show Dr. Trudeau and his staff the efficacy of opsonins in dealing with the victim of tuberculosis. Unknown to Wright, the staff at Saranac Lake had been experimenting with opsonins for about three years—almost as long as he had interested himself in the subject—and they had ready fifteen specimens of blood of which they asked the distinguished visitor to determine the opsonic index. Wright undertook his task cheerfully and announced results differing with each specimen. He was then told that of the fifteen specimens, seven were taken from different individuals, but eight were taken at the same time from the same subject. According to Wright's results, the eight differed as radically from one another as any one of them did from the other seven.

It may be that Wright was a victim of that evasive laboratory malady, "faulty technique," but if "the master of opsonins" failed in eight tests out of fifteen, there is little hope for the ordinary physician or even for the laboratory man who had any other idea in his mind than the one subject of "opsonins."

Dr. Cabot is himself a man of wide laboratory experience and his views of the efficacy of recent methods of laboratory procedure may be accepted as quite authoritative. By heeding his suggestions, the general practitioner may be saved enormous useless labor entailed in following the false gods of diagnosis over a barren and fruitless waste.—*Bulletin of the Illinois State Board of Health.*

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ORIGINAL ARTICLES

DIRECT LARYNGOSCOPY AND TRACHEO-BRONCHOSCOPY.

JOHN J. KYLE, M.D.

INDIANAPOLIS.

The method of direct inspection of the larynx through the mouth has received the attention of the medical profession for a great many years, but has had few advocates, for the reason that a great deal of skill is required and especially-designed instruments that may easily be passed through the mouth and into the larynx without producing pain or injury to the tissue are necessary.

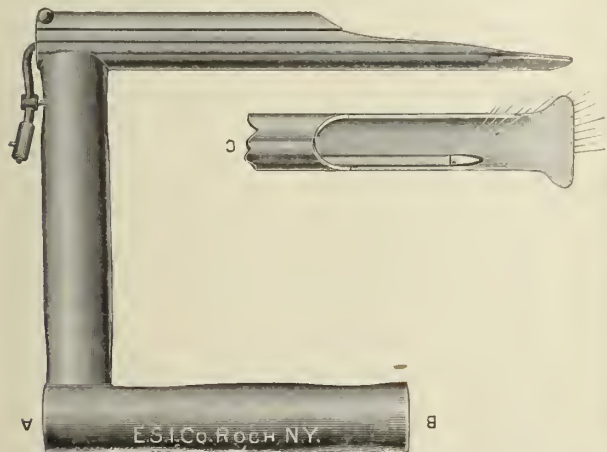


Fig. 1.—Jackson's separable speculum. A-B, handle; C, light and speculum.

A number of years ago Kerstein invented the autoscope for direct inspection of the larynx, and since that time Professor Killian of Freiberg has added to the armamentarium a tube speculum (see illustration) which is more easily manipulated than the Kerstein autoscope. Fol-

lowing the tube speculum of Killian, Chevalier Jackson has suggested a separate speculum, which is especially useful in the examination of the larynx as well as an aid in the insertion of the bronchoscope or tracheo-bronchoscope. The Jackson tube speculum has the advantage of having a light at the distal end, thus assuring us greater ease in passing the speculum directly into the



Fig. 2.—Jackson's separable speculum in position for direct inspection of the larynx.

glottis than where we have to depend upon illumination with a head mirror or Kerstein lamp as in the Killian method.

There are many difficulties to be encountered in direct inspection of the larynx, among which are spasm of the glottis and strain upon the neck

by prolonged drawing back of the head. In those suffering from deformities of the neck from rheumatism, ulcerations, etc., which prevent throwing the head far back, the operation is unsatisfactory. For the detection and removal of foreign bodies or morbid growths from the larynx, where the patient can throw the head far back, direct laryngoscopy is the ideal method of procedure.

In the direct inspection of the larynx in the adult local anesthesia is usually sufficient and is secured by the application of a 20 per cent. solution of cocaine, applied with a cotton-tipped probe. The first application should be about the base of the tongue, pharynx and tonsils, and after waiting a few seconds the probe may be passed directly over the epiglottis and into the glottis. After a wait of about four or five minutes the anesthesia is usually complete enough to enable a dextrous operator to pass the tube speculum directly into the larynx. However, if this form of anesthesia is insufficient, or the patient is a child, chloroform anesthesia may be necessary. Under such circumstances the position of the patient is the same as that described later for tracheo-bronchoscopy.

Where there is a small tumor located on the vocal cords it is difficult in the indirect method, that is, with the aid of a laryngeal mirror, to insert a biting forceps with sufficient dexterity to remove a portion of the growth for microscopical use without at the same time injuring some of the adjacent tissue, and if, perchance, this be a malignant growth, such irritation is to be deplored. Again in the application of escharotics to the arytenoid cartilages it is almost impossible, except in the hands of those greatly skilled, to make an application directly to the diseased area, whereas with the tube speculum there is no danger of injuring normal tissue when making such application, because the lesion is directly under the eye of the surgeon.

Direct inspection of the larynx is of inestimable value in the removal of foreign bodies which have become fastened in the glottis. The old method of opening the trachea and forcing the foreign body out with an instrument is dangerous to the life of the patient. Of course, there is always a possibility that the exigencies of the case might demand an opening of the thyroid cartilage or trachea for the removal of the foreign body, and the same rule may be applied to the removal of papillomata, fibromata and other neoplasms. However, the removal of intrinsic malignant growths will necessarily demand some external operation upon the larynx

for the reason that a large area of tissue should be removed to insure complete eradication of the diseased tissue. Direct laryngoscopy is most efficient, therefore, for inspection of the larynx and the removal of foreign bodies and non-malignant growths from the glottis.

The tube speculum as described is quite sufficient to thoroughly illuminate the glottis. Before insertion into the mouth the speculum should be thoroughly sterilized by dipping in alcohol, dried and smeared with vaselin, after which it is inserted in the same manner as an ordinary tongue depressor. The head is thrown far back, as shown in the illustration, so as to bring the mouth on a direct line with the trachea. The speculum is directed to the base of the tongue anterior to the epiglottis: the tongue and hyoid bone are firmly lifted up and held in position and supported for a few seconds so as to tire the constrictor muscles, and after a short time has elapsed the speculum is lifted up and passed over the epiglottis into the glottis. In passing the speculum into the throat care must be taken that it is not passed too deep, that is, back of the arytenoid cartilage or into the mouth of the esophagus.

With the tube speculum now in position, the operator, as shown in the illustration, looks directly into the larynx. Sometimes it is better for the assistant to stand behind the patient and support the head. The patient is seated upon a low stool, thus giving the operator a better field for observation. The speculum can be transferred from the right to the left hand for any instrumentation that may be necessary.

By tracheo-bronchoscopy we mean the art of direct examination of the trachea or bronchi, under artificial or natural light, through a specially-designed tube or bronchoscope, either by way of the natural channel or through a wound in the trachea. This method of procedure is especially indicated when we wish to discover deformities of the trachea, cicatrices, enlarged thymus or thyroid glands which may be pressing upon the trachea, changes in the mucous membrane of the trachea and neoplasms. Probably the most useful application of tracheo-bronchoscopy is for the removal of foreign bodies from the trachea or bronchi.

To Professor Killian of Freiberg belongs the credit of bringing this unique procedure to its present high plane of usefulness. In 1897 Killian first removed a foreign body from the bronchus and suggested both upper and lower tracheo-bronchoscopy. Tracheo-bronchoscopy is subdivided into upper direct tracheo-bronchos-

copy, which is an approach to the trachea through the natural channel, and lower tracheo-bronchoscopy, which is an approach to the lung cavity through a wound in the trachea, that is, by the performance of a preliminary tracheotomy.

Tracheoscopy is direct examination of the trachea through the glottis with a shorter tube than that required in upper direct tracheo-bronchoscopy. The tubes required for upper direct tracheo-bronchoscopy vary in size, depending upon the age of the patient. Their lengths and widths carry from 7 mm. by 9 cm. to 9 mm. by 18 cm.

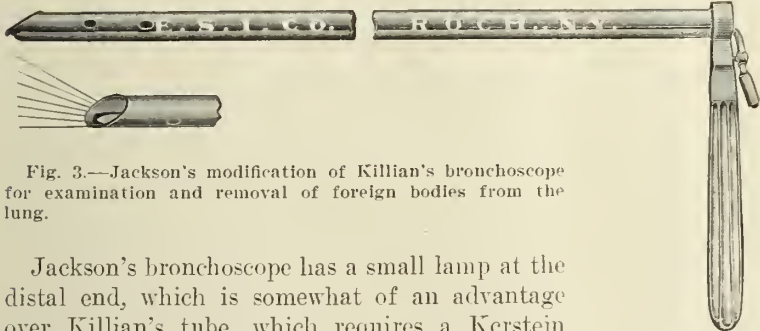


Fig. 3.—Jackson's modification of Killian's bronchoscope for examination and removal of foreign bodies from the lung.

Jackson's bronchoscope has a small lamp at the distal end, which is somewhat of an advantage over Killian's tube, which requires a Kerstein head lamp for illumination. For lower tracheo-bronchoscopy a much shorter tube is required than even in the upper bronchoscopy. These tubes are all straight and so constructed that in passing into the trachea or bronchi there is little danger of doing great trauma to the mucous membrane.

The question of anesthesia for tracheo-bronchoscopy is one of great importance. In adults a 20 per cent. solution of cocaine is usually all that is necessary. This should be applied first to the larynx with a cotton-tipped probe, the best form of applicator being the long, flexible applicator used by gynecologists. This probe has an olive point and in consequence there is no danger of losing the cotton in the larynx. The cotton should not be changed during the anesthetization of the larynx and trachea. After waiting a few minutes, the tongue is retracted and drawn forward again and the applicator is passed directly into the trachea, this usually being followed by a spasm of the trachea, coughing and a great deal of distress. The probe is quickly withdrawn and the cotton again saturated with the cocain, being inserted after a few minutes as before and passed down to the bifurcation of the trachea. After ten or fifteen minutes the anesthesia is usually sufficient to enable a dextrous operator to pass the bronchoscope through the larynx and into the trachea. In children and in those of a highly nervous temperament chloroform anesthesia is better. It is necessary to secure complete anes-

thesia, otherwise the patient will toss about on the table and prevent the easy manipulation of the instruments and also predispose to injury of the mucous membrane of the larynx and trachea. Where a local anesthesia alone is used the patient usually sits erect upon a low stool, his spinal column in as near a vertical line as possible and head thrown far back and resting upon the knee of an assistant. Of course in those who are very old where the neck muscles are rigid, or in an individual who is suffering from some spinal disease or some condition which may prevent the bending of the head backward to suf-

ficient degree, this method will have to be abandoned. However, where the head can be turned far back the patient's mouth is opened wide, the base of the tongue and the epiglottis are lifted upward with the Jackson separable speculum so as to bring the laryngeal box in the most direct line with the mouth, and in this position the bronchoscope is passed directly into the larynx

and trachea, after which the speculum may be removed. The proximal end of the bronchoscope is turned to the right or left of the patient's mouth and back toward the angle of the jaw. By an easy boring motion the bronchoscope is passed into the trachea. If the right bronchus is to be explored the proximal end of the bronchoscope is forced to the left side of the patient's mouth; if the left bronchus, it is forced to the right side, thus a direct line into the bronchial limb is secured. There is usually a great deal of mucus, particularly in adults, which accumulates in the bronchoscope and which may, if the manipulation is prolonged for any length of time, totally obscure the vision of the operator. To obviate this some form of suction tube is necessary. The one I used in the last two operations was an ordinary drainage tube attached to a large ear syringe. Whenever the view becomes obscured the assistant should insert the tube and devote himself to keeping the field free from mucus.

The choice of procedures in the removal of foreign bodies from the bronchi of small children depends upon the age of the child, that is, whether or not we shall do an upper or lower tracheo-bronchoscopy. According to Ingals, upper tracheo-bronchoscopy in a child under 3 years of age is unsatisfactory, and in consequence of this a preliminary tracheotomy should be done and the short bronchoscope inserted in the trachea for the removal of the foreign body. If

there is deformity of the larynx or cicatricial bands or any reason which might prevent the easy insertion of the bronchoscope through the natural channel, a lower tracheo-bronchoscopy should be performed.

In adults upper tracheo-bronchoscopy is probably the procedure of choice. Killian has removed over 161 bodies from the larynx and bronchi by direct bronchoscopy and laryngoscopy. In his collection are buttons, fish bones, pebbles, whistles, coins, safety-pins, etc. The question always arises in cases of this character, especially where the foreign body is lodged in the lung, as to the time which should elapse before the surgeon resorts to active operative measures for its removal. History is replete with cases of foreign bodies in the lung which have remained embedded for weeks or months, finally being coughed out. With the invention of the bronchoscope it seems to me that it would be advisable to try to remove the foreign body at the earliest possible moment. If the body is embedded in the larynx it is especially necessary that it be removed without delay.

The report of the following cases illustrates the value of tracheo-bronchoscopy:

CASE 1.—This was a case of a man who was shot near the left claviculo-sternal articulation, the bullet ranging downward, coming out on the right side below the scapula. There resulted from this injury complete paralysis of the left adductor nerve, producing total loss of voice. Upper tracheo-bronchoscopy was performed at this time to see whether or not there was a stricture of the trachea. It is nearly impossible to see further than the second or third ring of the trachea in laryngoscopy. In this case no structural change was found in the trachea and the paralysis was evidently due to wounding of the left recurrent laryngeal.

CASE 2.—This was a case of a woman with a supposed foreign body in the trachea or esophagus. The trachea and esophagus were anesthetized with a 20 per cent. solution of cocaine. I first tried to do a tracheo-bronchoscopy with the patient in the upright position, but on account of her inability to throw her head far back and keep her spinal column rigid without great distress, the examination was unsatisfactory, and in consequence of this I was compelled to put the patient in the recumbent position. I first examined the trachea, passing the bronchoscope down as far as the bifurcation, but could detect nothing. On account of the distress in breathing and difficulty in swallowing it was presumed that the foreign body might be in the esophagus and pressing upon the trachea. In consequence of

this I tried to do an esophagoscopy, but on account of having no mandrin with the bronchoscope it was nearly impossible to pass this narrow tube into the esophagus. We were enabled, however, to work it down into the esophagus for a number of inches. The manipulation not being very satisfactory, the operation was suspended for that day with the intention of operating the following day with the aid of the mandrin. However, on the following day the patient reported that there was no distress in the region complained of and the foreign body had evidently passed into the stomach or the condition was one due purely to a neurosis.

CASE 3.—This was a case in which a large piece of chewing gum was sucked into the right bronchus of a man aged 32 years. The day before appearing for examination, while working, he suddenly sucked the chewing gum down into the lung. There was more or less pain, slight distress in breathing and periodical attacks of coughing. Under 20 per cent. cocaine anesthesia, with the patient in the upright position, with head thrown far back, the bronchoscope was passed directly into the right bronchus through the natural channel. The object could be detected with the light. I made a number of unsuccessful efforts to grasp it, but there was such an accumulation of mucus in the tube, obstructing absolutely any view of the field, that I was compelled to withdraw the tube for cleansing purposes. As the tube was withdrawn the chewing gum was coughed out. Evidently in my manipulation the gum had been detached, allowing sufficient mucus to get behind it that in the effort of coughing the object was easily dislodged.

CASE 4.—This was an infant 14 months old with a supposed foreign body in the right lung. While playing three days before being presented for examination the child suddenly became cyanotic, very nearly dying from suffocation. The family at once suspected a foreign body in the lung and thought it was one of two things, a nail or a grain of corn. This case was brought to Indianapolis Tuesday night by Dr. Plouffe of Elwood, and through the courtesy of Dr. Oliver was referred to me. Dr. Cole immediately made an x-ray photograph of the case, but could detect no foreign body. However, there was a blurring of the plate near what was presumed to be the bifurcation of the right bronchus. The child was seized with periodical attacks of coughing, crying and in evident great distress from pain and difficulty in breathing. Friday morning the infant was in a much worse condition, was pale and very restless, and all the symptoms demanded immediate relief. Friday evening the child was anesthetized with chloroform, and in the prone position as described, without any par-

ticular effort, the bronchroscope was passed into the right lung. My light was somewhat imperfect and in consequence it was very difficult for me to see through the long tube into the right bronchus. I tried to grasp the foreign body, which could be detected, with a long extracting forceps. After making a number of efforts, and because the child vomited while the tube was in the trachea, I decided to abandon the route through the natural channel and endeavor to grasp the object through a wound in the trachea, that is, by doing a preliminary tracheotomy. I had some slight difficulty in doing the tracheotomy; however, after this was accomplished a short bronchoscope was passed directly into the right bronchus. With the aid of an ordinary head mirror I could distinctly see the grain of corn filling the lumen of the right bronchus. It was very easily extracted with the aid of the extracting forceps. At the suggestion of Dr. Oliver, the tracheal wound was allowed to remain open, and this was very fortunate, for there was a seeming edema of the larynx and a great deal of edema of the bronchial mucous membrane as well as of the lung structures, and for the first twelve to fourteen hours the child had great difficulty in getting enough air to aerate the blood. On the second day the child seemed to improve rapidly. There was no temperature, though some restlessness and rapid and difficult breathing. Nourishment was taken both from a spoon and the breast. One-twentieth grain of morphin was given after the operation and repeated Saturday night and likewise Sunday night. Hypodermic injection of strychnia and digitalin were given the morning after the operation. We had hoped by the use of strong doses of morphin and atropin to prevent any increase of the edema of the lung. The day following the operation there was no sound made by the child whatsoever, showing that there was a total loss of the vocal action. Sunday morning the child began to breathe very well through the nose and mouth. We closed the tracheal wound with the finger at times to test this point. It also began to cry very indistinctly, showing that the function of the larynx was being gradually restored. About 1 o'clock Monday morning the child began to show some distress in breathing, which continued throughout the remainder of the night, and about 7 o'clock, while the child was taking nourishment from the breast, it suddenly stopped breathing and was dead in a short time. I do not know how to account for the death of the child unless there was a paralysis of the pneumogastric from the edema of the lung or suffocation with paralysis of the heart from some undue pressure upon the tracheal wound which stopped respiration long enough to produce death from paralysis.

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DIAGNOSIS OF INTESTINAL OBSTRUCTION.*

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Acute obstruction of the intestines is one of the most fatal diseases the practitioner has to encounter. The high mortality is due to delay in making a diagnosis. If the condition is detected and an operation done in the first few hours, few would succumb; it is, therefore, to the delay of surgical interference that this high mortality is due.

I think all surgeons will agree with Moynihan, viz.: "It is still, unfortunately, true that in the very great majority of cases the surgeon is called upon to act in too late a stage of the disease. It is not too much to say that in a consecutive series of twenty cases of average intensity the condition disclosed at the operation will show that in at least fifteen, operation has been too long deferred. To operate early in a case of intestinal obstruction is an experience that few surgeons often enjoy." In speaking of the operation he says: "The surgery of acute obstruction is disheartening work. . . . There are few surgeons who, in a series of twenty or more cases, can show a lower mortality than 50 per cent. Anything over a 10 per cent. is the mortality of delay."

The difficulty, therefore, is the failure to diagnose these cases before irreparable damage is done, and this failure is chiefly due to the difficulties which it presents. The symptoms so closely resemble those of slight digestive derangement, as well as other diseases of the abdominal organs, that it is at times very difficult to distinguish between them. The physician fears that he may unduly alarm a patient or probably place himself in an unfavorable attitude by too early suggestion of surgical intervention. There are not infrequently unscrupulous competitors who are only too glad to make capital out of such a position. In every community there are doctors who pose as opponents to operations; they claim great success in treating all such cases by potent medical measures known only to themselves. There are those who never lose a case of appendicitis and dissolve gallstones with olive oil. They still have to be reckoned with, but the march of popular education is fast doing away with them.

The idea that there is any antagonism between medicine and surgery is too preposterous to be discussed here. The general practitioner who is

* Read before the Southern Illinois Medical Association.

first to recognize the need of operative measures will, in the long run, win popular favor.

We should, in all cases in which pain, vomiting, coprostasis and meteorism are the symptoms, be on the lookout for a mechanical obstruction. There are two very common errors at the onset in these cases. The patient has pain, he clamors for relief and a hypodermic of morphin will give it. We have the best authority for giving it, the patient and his friends are delighted with our ability to relieve. In mechanical obstruction the relief of pain does not stay the disease. We must admit, however, that one dose is imperative in many cases, but the necessity of a second should be taken as almost positive evidence that the trouble is not a slight ailment which will right itself, but a grave one requiring our closest attention. Another error is to give these patients a purgative, assuring them that its action will remove the trouble. If undigested matter is in the alimentary canal or if improper food has occasioned poisoning, this may be of service, but as a matter of fact, in these cases, as a rule, nature asserts herself and the patient has spontaneous evacuation or even diarrhea; at least, the bowels are easily moved. If, therefore, a few hours have elapsed and no action is obtained, the suspicion of serious obstruction should be entertained.

Another error at this time is delay in the effort to make an exact anatomical and pathological diagnosis. We need only to determine that there is or is not a lesion requiring surgical interference; now how are we to do this? Let me briefly discuss the symptoms and some of the common sources of doubt. Eisendrath says: "If a patient, suffering from a sudden attack of abdominal pain, has constantly recurring vomiting, and every effort to secure the passage of feces or flatus results negatively, a diagnosis of intestinal obstruction may be made." In addition to these symptoms, tympany is generally present. With this symptom group but little difficulty would be experienced; however, unfortunately, any one of these may be absent and all of them occur in other abdominal diseases.

Pain is absent in a few cases, but these are exceedingly rare, and in these the persistence of the other symptoms should put us right. Pain is, however, almost always present, is paroxysmal in character, and at times its location, together with the excessive peristalsis, gives us a good idea of the location of the lesion. The pain may be relieved by an opiate, but will soon return and there will be a demand for a repetition of the dose.

The vomiting is persistent and worse during

attacks of pain. The contents of the stomach is first ejected, then bile-stained mucus, later fecal vomiting occurs, but that is not until the second or third day and should not be waited for.

I need hardly warn you of the necessity of excluding meningitis; here the vomiting is explosive, nausea continuous, the abdomen is flat, and there are the other symptoms, headache and fever. I have seen several cases of meningitis which were mistaken for obstruction.

Meteorism is usually early in obstruction, except when the obstruction is near the stomach, when it is absent except in the stomach. It comes on more slowly also when the obstruction is low, that is, in the colon or sigmoid. Tympany occurs in peritonitis, but here there is a decrease, and in extreme cases absence of all peristalsis; with a stethoscope on the abdomen not a sound can be heard, while with obstruction there is increase of peristalsis, which is evinced by gurgling that can be heard for several feet. In obstruction, as a rule, it comes on rapidly and the bowels become enormously distended. Constipation, which is complete, is the chief symptom; a little fecal matter washed out by enemas, but there is no full fecal evacuation nor passage of gas. Enemas are either retained or expelled without force.

It is necessary to determine if the coprostasis is due to fecal impaction. In all cases examine the rectum and you may be able to locate the obstruction at that point. You may find it filled with feces, and if the obstruction is higher you will find the rectum empty and its walls ballooned. Fecal impaction does not occur nearly so often as is generally supposed; when it does occur the symptoms are not so alarming, the patient does not appear so ill, by palpation the collection can be found in the colon and there is a history of chronic constipation, of passage of hard round fecal masses from the bowels. Unless these masses have caused obstruction there is no severe vomiting or tympany, and in these cases, as pointed out above, the fecal masses can generally be palpated.

Repeated efforts to move the bowels by purgatives or enemas are only powerful for harm. The question naturally arises: "How long should you wait for the action of purgatives?" I have consulted a number of text-books, but found no definite rule laid down; in fact, it is difficult to formulate any rule which will fit all cases. The difficulty is to keep from applying a fixed rule to those cases of coprostasis in which no true obstruction occurs, and I want it to be distinctly understood that what I am about to say does not

apply to those cases which have slight pain, moderate vomiting, little or no tympany and where the whole aspect of the patient shows that the condition is not alarming. The fact is we too often forget that when little food is taken the bowels do not move, and under such circumstances no harm comes from a failure of the bowels to act for several days. If, in fact, no other symptoms arise, the mere absence of bowel actions need not worry us; I mention this because I have seen a number of cases where obstruction had been diagnosed for the reason that the bowels have not acted for a few days, when the presence of other symptoms and the general appearance of the patient should have excluded this disease. When, on the other hand, all symptoms are severe the whole aspect of the case shows that the patient is seriously ill. I can not too strongly urge you that repeated efforts to move the bowels and hours of waiting are dangerous; six to twelve hours is long enough, and in a clear case do not wait at all.

Let us suppose we are called to a patient who is suffering with abdominal pain and vomiting. Unless the pain is extreme, do not give morphin; if you are compelled to give one dose remember that it is not curative and you are to find the cause of the trouble if possible and remove it. If there is a probability of an error in diet, give a dose of castor oil and an anema, and if this is really the cause relief will soon follow. If these measures fail, there is a return of the pain, and vomiting and tympany appears, the patient giving evidence of grave illness, the case is almost surely one which demands surgical interference and stronger purgatives are powerless. Enteritis in rare instances causes all these symptoms, but those in which the bowels do not move are extremely rare. All these symptoms may come from a fecal impaction, but the previous history and palpation of masses in the colon will exclude this.

In inflammatory diseases we have fever, besides nearly all of them are operative cases and no time should be lost in trying to differentiate in doubtful cases.

Do not forget to examine for hernia, and remember that it is not necessary to find a large mass; I have seen two cases in which a small hernia was overlooked until the sufferer was *in extremis*.

You are rarely justified in waiting more than six to twelve hours, and, as I said before, where the symptoms are grave do not wait at all.

I have purposely avoided discussion of the special forms of obstruction, for I want especially

to emphasize the importance of the diagnosis of the obstruction and prompt surgical intervention as the chief point. The accurate diagnosis of the lesion and location should be made when possible, but that should not be allowed to delay action.

Let us now briefly consider chronic obstruction: it is generally due to cancer or other neoplasm, or a gradually contracting stricture, or bands of adhesions. The symptoms which should attract our attention are attacks of pain in paroxysms, the bowels are difficult to move and gradually stronger purgatives are necessary, and as the trouble progresses these attacks are more frequent and vomiting and tympany follow; finally we have the same symptom group as in acute obstruction. In fact, we should be on the lookout in all cases of constipation with recurring attacks of pain, if repeated purgation is required. If the obstruction is in the colon the caliber of the stools becomes less and later only liquid stools pass.

By far the greater number of these chronic obstructions is due to carcinoma, and the early diagnosis is their only hope. Unfortunately, only a small proportion can be diagnosed early enough for operation, but with proper care a larger number could be. I believe there are some, and perhaps many, cases of cancer which are ingrafted on a benign trouble. I have recently seen a case in a man who had suffered with the typical symptoms of partial obstruction for eight years, due to cancer of the sigmoid, and it is more than probable that the initial lesion was benign. I had one man with benign stricture of the sigmoid, who had suffered for fifteen years with attacks of partial obstruction, and an operation was not suggested until he was *in extremis*.

In all grave diseases of the intestines, where there are recurring attacks of pain, constipation, vomiting and tympany, a very careful investigation should be made, and unless there is some clear contra-indication an exploratory colotomy should be made.

In fact, always bear in mind that an exact diagnosis in these cases is often impossible, but you can generally determine whether the lesion is organic and can be relieved only by surgery. Do not wait until all chance for recovery is lost, but recommend an early exploration when the chances are good.

The mortality in these cases would not be high, and when doctors learn to diagnose cases of obstruction early we will be able to bring the mortality in acute cases to one-fourth or less the present percentage, and in the chronic cases perhaps make even a better showing.

OBSERVATIONS ON THE SURGERY OF
GALLSTONE DISEASE.THOMAS BARKER EASTMAN, M.D.
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At this late date it seems quite superfluous to attempt to establish gallstone disease as one demanding surgical intervention as well as giving rise to a number of pathological conditions in certain viscera adjacent to the gall bladder, yet when cases are almost daily consulting the operator, reciting a history of all sorts of futile efforts to dissolve or dislodge gallstones, or a history of divers and sundry stomach and intestinal disorders, dyspepsia and the like, it is evident that there are yet those who plough their furrows with forked sticks.

The various sodium salts, olive oil and such internal medicaments never did dissolve a gallstone. They will not dissolve a gallstone *extra corpore*, and none of the advocates of their use has ever given even a semi-scientific explanation as to what chemical change they make in the bile or blood to effect the dissolution of the stones. All these salts and oils ever do is to reduce the inflammation in the wall of the bladder and render it more tolerant of its contained foreign bodies.

Nor do the surgeons stand alone in this opinion. Dr. J. H. Musser says: "I have never seen any relief to the gallstones from the use of olive oil, but I am bound to say that sometimes there is a relief to the symptoms. Such relief, so far as I can see—and I think it is the consensus of opinion generally—is owing to the fact that with gallstones there is usually a hyperacidity, and that because of this there is either simple gastralgia or pyloric spasm. We all know also that when olive oil has been administered the patient can almost always bring the doctor a handfull of pseudo gallstones. I think we all agree that, even though there is a relief of the symptoms, the patients in most instances will soon come to the surgeon, because the symptoms continue and something active must be done."

It is conceded that real gallstones do pass out into the intestine, often not through the ducts but by perforation, and are discharged in the feces, but in at least plural instances, and particularly after a long course of salts and oil, the writer has found the so-called stones to be composed of saponified oil and salts.

It is well known, of course, that not a few very able men advocate the various water cures as worthy of trial before operation, and that this treatment does in a fair number of instances re-

sult in a symptomatic cure, but it is nevertheless the fact that many of these cases must return at intervals for another temporary cure and, in the meantime, who shall say that the prolonged localized irritation of the stones is not starting up a malignant process in the gall bladder or that a stone or stones originally in the bladder are not working their way into the ducts, there eventually to make the case much the worse, the plainly imminent operation more difficult, and the prognosis more grave. The quiet gallstone is often more dangerous than the one giving rise to the most intense paroxysms.

In this connection Kehr says: "Even the latent cholelithiasis we should always regard with suspicious eyes, for the 'quiet work' of gallstones is often the most destructive. Carcinoma often arises through stones which cause no distress, and perforations into the hollow organs develop not rarely without any symptoms. No one should trust latency too much; in malignancy and insidiousness no disease of man compares with cholelithiasis."

The statistics of Riedel (52 cases of carcinoma in 650 gall-bladder operations) and Peterson (34 cases of carcinoma in 168 gall-bladder operations) only serve to corroborate in cold figures the statement made above. The prolonged inflammation of the gall-bladder mucosa frequently results in a proliferation of the epithelium in the depths, with a papilliferous form on the surface. It is not at all necessary that the stone lie in the gall bladder, since anything which results in a damming up of bile and mucus in the gall bladder will result in irritation quite as much as does a stone in the bladder itself. This is explained by F. Pels-Leusden on the basis that in addition to the mechanical irritation caused by a stone, there are other irritative influences, such as those caused by the presence of bacteria or of bile of altered consistency or chemical character. An early result of this irritation is a proliferation of the lining epithelium of the gall bladder, and this proliferation shows a marked tendency to go over into the formation of carcinoma.

Considered from an etiological standpoint, gallstones rarely develop, and *restitutio ad integrum* does not occur here any more frequently than it does in the appendix. Therefore, brief consideration of the bacteria present in the infected gall bladder may not be amiss. In a series of 216 patients operated on by Deaver and discussed by A. O. J. Kelley the infective agents of seventy of the patients were as follows:

	CASES.	PER CENT.
<i>Bacillus coli communis</i>	23	32.8
<i>Bacillus typhosus</i>	7	10.0
<i>Staphylococcus pyogenes aureus</i>	2	2.9
<i>Streptococcus pyogenes</i>	1	1.4
<i>Staphylococcus pyogenes albus</i>	1	1.4
<i>Bacillus coli</i> and <i>staphylococcus aureus</i> ..	2	2.9
No bacteria	34	48.6

Naturally, one would expect to find the *baecillus coli communis* present in the largest percentage of cases, but it is in the *baecillus typhosus* that the most interest lies for the general practitioner, and here, at the risk of being trite, slight digression is made to emphasize the importance of the connection between typhoid and biliary infection, first noted by Bernheim some twenty-five years since.

In 1896 Hanot and Milan demonstrated the *baecillus typhosus* in the center of gallstones of recent formation in the gall bladder. Cushing found the organism in the bile removed from patients who had died of typhoid fever. In 32 cases of typhoid cholecystitis which were autopsied and operated Ehret and Stoltz found gallstones in 20.

Chauffard found that 20 per cent. and Cushing 30 per cent. of cases of cholelithiasis gave a history of having had typhoid fever. Nor is it necessary that the attack of typhoid be a recent one, as typhoid organisms seem to be possessed of great longevity in the gall bladder and ducts, Droba and Hunter reporting cases in which the *baecillus* was found seventeen and eighteen years, respectively, after the occurrence of typhoid. And bearing in mind this connection between gall-bladder infection and typhoid, we must conclude that the latter bears a more important causative relation than is generally supposed by those not engaged in the particular study of gall-bladder pathology.

The symptoms of gallstone disease, in their broadest sense, are not always appreciated as they should be; that is, the gall bladder itself frequently escapes conviction by shouldering the offense on other viscera and particularly the stomach.

There is every reason why the gall bladder, by virtue of its anatomy and mechanics, should when seriously affected make itself felt in the syndrome indifferently characterized as indigestion or dyspepsia.

The accredited diagnostic symptoms of gall-bladder disease have undergone a radical change within the last few years. It is not long since the cardinal symptom of gallstone disease was regarded as a shooting pain toward the umbilicus. As a matter of fact, it is rare indeed to hear a

patient complain of this symptom. Jaundice is no longer an essential diagnostic element. We may find clay-colored stools or we may not find clay-colored stools in cases where operation positively reveals gallstones; indeed, a stone must be tightly packed in the common duct before we have this condition.

The pain in the back does not occur in all cases and is not essential for diagnosis. Pain in this location occurs in so many disorders of the viscera in the region of the gall bladder that it might indicate any one of half a dozen of the former. If there is any one train of symptoms which should lead one to suspect the chronic involvement of the gall bladder or its ducts, it is that complex of symptoms carelessly denominated as dyspepsia, and this is true particularly where after prolonged treatment by medical methods now in vogue the patient is left just a little worse and eventually reaches the surgeon weak, thin in flesh, tender over the gall bladder, palpation revealing a general thickening in this region.

The gall bladder and stomach are parts of one physiologic system, and it must be evident in this case, as is evident in other parts of the anatomy, that serious involvement of the one means serious involvement of the other. The gall bladder is as frequently at the bottom of the trouble as is the stomach. Again, the proximity of the gall bladder to the pylorus affords ample opportunity for trouble. We all know how little irritation is required to produce adhesions, and we know just as well that a persistent inflammation of the gall-bladder mucosa is likely to extend to its peritoneal covering, and, this extension having taken place, we know that adhesions of the surrounding viscera, particularly of the duodenum and pylorus, are likely to occur. It is also evident, when we consider the close inter-relation of the lymphatics of the lower part of the gall bladder and its ducts with those of the pyloric end of the stomach, that an infection in these ducts is very likely to extend to the walls of the stomach.

Mechanically, gall-bladder diseases may affect digestion in various ways. Stones may produce pressure. Adhesions may drag upon the pylorus or duodenum, or stones may be so large in the common duct as to interfere with the flow of bile, or in the ampulla of Vater they may be so placed as to interfere with the passage into the intestine of both the hepatic and the pancreatic juices. And these latter conditions may exist for years and not give rise to the sharp, shooting pains or even to much distress, heretofore considered an essential factor in the diagnosis of gallstones.

One rarely hears a discussion upon this subject in which mention is not made of the fact that gallstones have been found postmortem in patients who never complained of them; that is, the patients never complained of the so-called classic symptoms of the disease. However, it would be exceedingly interesting to know how many of them had suffered for years from the long list of referred and masked symptoms we now know gallstones to bring about.

From a simple incision and drainage, gallstone surgery has developed in its various phases into one of the most important and beneficial departments of surgical practice. As to the indications for operation in gallstone disease, there is little or no question, surgeons for the last year or so having concerned themselves with the indications for cholecystotomy as against cholecystectomy, the latter being of rather recent development, yet a procedure warranted in a considerable number of cases.

The gall bladder unquestionably furnishes an ideal drainage tube where drainage is all that is demanded. The presence or absence of stones does not establish an indication as to which procedure to employ. However, there is a large percentage of cases of inflammation of the mucosa of the ducts and bladder with stones wherein vastly better drainage may be established through the bladder itself than by any other device, and here it may be said that after drainage of the gall bladder and its fixation to the abdominal wall, the bladder does not always atrophy, as the writer has in two cases, upon reopening the abdomen for other causes, found an apparently normal bladder, and in one of the cases the bladder in the previous operation had been found shriveled down tightly upon several small stones.

Where the stomach complications have given rise to the major symptoms, and particularly where pancreatitis is coexistent, it seems that unless the gall bladder is seriously involved simple drainage will give satisfactory results.

Again, where the patient is much reduced from long suffering with stone in ducts and bladder, where adhesions have formed and where cholemia exists, making hemostasis difficult to secure, it is frequently advisable to content oneself with removing the obstruction and securing drainage. The greatest reasons for removal of the gall bladder lies in the tendency of this viscus to undergo carcinomatous degeneration, which, once developed, rapidly extends into the liver substance itself.

Van Hook says: "Those inflammations that cause distortion of the gall bladder, either by

dilatation or, more particularly, by secondary contractures of the gall bladder, supply the best examples of inflammatory processes demanding cholecystectomy. Where stones are present in the gall bladder, and especially where they have become embedded in its walls, or where biliary matter of one kind or another coats the wall of the gall bladder, the organ may, unless good reason exists for leaving it, be very appropriately removed."

REPORT OF A SERIES OF LEUKEMIC CASES WITH BRIEF COMMENTS ON THE SYMPTOMATOLOGY AND TREATMENT.

FRANK B. WYNN, M.D.

INDIANAPOLIS.

It is not designed at this time to enter into a full consideration of leukemia. I desire simply to report eleven out of fifteen cases of this disease seen by the writer in less than a decade (five within the past year) and offer brief comments. Of these cases, nine were of the myelogenous and two of the lymphatic variety. Malaria appears to have had a causative relationship in four cases and injury in one.

The onset in four of the cases was insidious, marked by developing pallor and weakness. These were variously diagnosed as simple or progressive pernicious anemia, till the blood examination revealed the truth. In three the beginning was seemingly abrupt and characterized by severe and persistent pain. I have found pain in the splenic area, at one time or another in all the myelogenous cases, sometimes very severe. On the other hand, pain and tenderness of the bones was present in only two, and then not a marked symptom. In two cases the first symptom was "lump in the side."

I wish especially to emphasize the importance of hemorrhage as a symptom in leukemia. It appeals to me with especial force for the reason that four of the cases here reported died from this immediate cause (two of the lymphatic and two of the myelogenous variety) and a fifth came nearly doing so. The lymphatic cases died of hemorrhage from the mucosa of the nasopharynx and the myelogenous from subcutaneous extravasations. In this connection I am prone to suggest that some of those cases supposed to be "bleeders," or suffering from purpura, may after all be leukemics. Hence, in every such case there should be a blood examination made.

It is noteworthy that of the eleven cases I report, seven have died. This tells the story of

prognosis. Only one case appeared to be helped by medication, and that was by the administration of large doses of arsenic, and this improvement was only of transient duration.

I believe, however, a new era has dawned in the treatment of this previously hopeless malady. It has been my privilege to give only two of these eleven cases a fair and prolonged treatment with x-ray (Cases 5 and 6). Both were of the myelogenous type. Treatment has extended over two years, moderate in degree and with gradually diminishing frequency. It is a great mistake in my judgment to carry the Roentgenization to severe dermatitis. Not only should caution be exercised in the method of the application of the x-ray, but still greater care should be used in studying the physical and constitutional state of the patient. Most necessary are systematic studies of the blood, not alone hemoglobin estimation and the enumeration of the blood cells, but careful morphological studies of the corpuscles.

In one of these cases (Case 5) the spleen has remained normal in size, the general condition of the patient has been most excellent, and the state of the blood (except a slight leucocytosis—10,000) has been practically normal for a year.

The improvement in the other patient (Case 6), although not so marked, has nevertheless shown the subjective sensation and outward appearance of perfect health. From being a weak, dyspneic, edematous and bed-ridden patient, he has been able during the past year to continue his work as clerk in a shoe store without losing a day.

Certainly the results in these two cases afford encouraging evidence that in the x-ray we have the most valuable therapeutic measure for leukemia thus far discovered. And it is not too much to hope that with a more perfect understanding of the method of applying this agent permanent cures may be effected.

MYELOGENOUS LEUKEMIA.

CASE 1.—L. M., a farmer boy aged 10. In October, 1897, he suffered an attack of influenza, which was followed by persistent weakness and anemia. In January, 1898, Dr. O. B. Pettijohn attended him for a period of three weeks, when he had daily chills, followed by high fever and jaundice. Quinin relieved the condition and seemed to justify a diagnosis of malaria. The doctor was called again in April, when he recognized at once a grave condition and asked counsel. It was at this time I first saw the patient. He was anemic and considerably emaciated; temperature 102 F., pulse 120 and weak. Slight tenderness over the ribs, sternum and right tibia. No enlargement of lymph glands. The abdomen

was prominently rotund, and palpation revealed a firm, non-sensitive, notched spleen, almost filling the cavity; other organic conditions were normal as far as could be determined. The blood picture was typical. Red cells 1,800,000, whites 364,000, hemoglobin 30 per cent. It was estimated that the myelocytes constituted 36 per cent., polymorphonuclear cells 54 per cent., and the remaining 10 per cent. were chiefly small lymphocytes, with a few transitional and eosinophilic cells. A considerable number of nucleated red cells was noted.

All therapeutic measures utterly failed in the case. Disheartened by the gloomy prognosis given, the parents took the little fellow to a notorious quack, who promised brilliant results, giving almost daily treatments for nine months, when death came.

A restricted autopsy was permitted. Three quarts of serofibrinous exudate were removed from the left pleural cavity and a like quantity from the abdomen. In the lower lobe of the left lung were a number of pea-sized bodies, pearly white on section. Stained sections showed them to be lymphoid growths. The liver, enlarged to double the normal, showed extraordinary packing of the capillaries with white cells. A thin fibrinous pellicle covered the abdominal viscera. Both liver and spleen were firmly adherent to the abdominal wall.

CASE 2.—For the following interesting clinical history I am indebted to Dr. Bader S. Hunt, of Winchester, Ind.: The patient was a basket-maker, aged 48. There was tubercular taint upon either side of the family. In 1889 he suffered for six weeks with pain in the splenic region, and in 1894 he had a similar attack, attended by chills, fever and pain, often requiring morphia for relief. From 1894 the painful paroxysms came at first every two or three months, but toward the end were of nightly occurrence, accompanied by violent muscular contractions of the side. The pain was controlled by morphia, but not the involuntary movements.

Toward the end there was great sense of oppression in the chest. The spleen first appeared below the ribs in 1895, and at his death extended to the umbilicus; weight six pounds. There was no lymph gland enlargement, no osseous tenderness. Strength and nutrition were well maintained. The dominant feature of the case was pain in the splenic region. Arsenic, iron and manganese were used without benefit. Coverslip preparations gave the typical microscopic picture of myelogenous leukemia.

CASE 3.—Mrs. S., aged 35, German parentage, good family history. The only previous disease of significance from which she had suffered was malaria, of which she had several pronounced attacks, the last one four years previous to her death. Two years afterward she began to note

increase in the girth and a lump in the abdomen. She passed through the hands of two reputable practitioners without diagnosis. She then came under the care of Dr. T. A. Wagner, who suspected leukemia and sought counsel. I saw the patient about this time, six months before death.

The clinical evidences of the disease were emaciation, weakness, pallor (slightly icteric at times), fever (101 to 103 F.), sweats, tenderness over the ribs, and splenic enlargement, occupying slightly more than the left half of the abdomen. The blood examination revealed a typical picture: red cells 2,900,000, the percentage of nucleated reds was large, white cells 410,000. No therapeutic measures instituted afforded more than transient benefit. The progress of the disease was rapidly toward a fatal issue, the whole course of the malady being two years.



Myelogenous leukemia. Taken before x-ray treatment was begun. Mark shows splenic enlargement.

At the autopsy, besides the splenic enlargement showing fibrosis and mottling on cut surface, the most interesting feature was the condition of the ribs. Two of these had fractured spontaneously. The marrow was pyoid in character, and from atrophy the bones were reduced to mere shells, which could be broken by pinching between the fingers.

CASE 4.—M. L., a young woman employed as a seamstress. Family history negative, no history of previous disease bearing upon the case. The total duration of the disease was about two years. She had complained at times during this period of weakness, but did not quit work till a month before her death, when she consulted Dr. William Wands, whose first thought was of pernicious progressive anemia. A few days later Dr. S. E.

Crosc saw the patient. I saw her with these gentlemen the day before her death. She was then in a profound state of coma. This had been preceded by rather sudden deafness in both ears. There was a discharging furuncle behind one ear which had occasioned her a good deal of distress. The loose connective tissue about both eyes was enormously swollen from extravasated blood, making the face hideous in appearance and rendering impossible examination of the pupils. The cervical lymph glands were somewhat enlarged. The spleen extended only a short distance below the border of the ribs.

No blood count was made, but estimated from coverslip preparations the proportion of red to white cells was 3 to 1. The differential estimation gave a large proportion of myelocytes (44 per cent.) and a great many nucleated red cells. It seems certain that the immediate cause of death in this case was hemorrhage. No postmortem was granted.

CASE 5.—L. M., farmer's wife, aged 36, of excellent family history, and mother of one healthy child. Never ill till present trouble appeared in December, 1904. She then noted a "lump" in the side, and during the succeeding spring and summer she grew weak, sweat a great deal and the menses ceased for several months.

In December, 1905, the patient was referred to Dr. O. G. Pfaff for suspected abdominal tumor, and by him in turn to the writer. She was then having considerable pain in the splenic area and fever (100 F.). The conspicuous feature of the case, however, was the prominent abdomen, due to the enlarged spleen which filled two-thirds of the cavity.

Blood examination made at this time gave hemoglobin 55 per cent., red cells 3,200,000, white cells 257,000. The myelocytes constituted 41 per cent. and the polynuclears 52 per cent. of the total leucocytes. Nucleated reds numerous.

The patient has been under somewhat systematic x-ray treatment, never, however, carried to the point of dermatitis. The splenic area, and the ribs both in front and behind, have been subjected to short exposures from a medium vacuum tube: at first twice a week, gradually diminishing the frequency to once a week, and for the past year not oftener than once in a fortnight. The clinical evidences of improvement were very marked. In three months, besides the return of strength, color and sense of well-being, the spleen diminished to practically the normal size, and has continued so up to the present time, a period of two years.

The improvement shown by the blood findings was likewise conspicuous. Differential studies of the leucocytes in cover-slip preparations, taken at different times, revealed the following: In the total decrease of leucocytes the myelocytes showed the first and most marked diminution. It was then observed that the number of transi-

tional cells, those with saddle-bag nuclei greatly increased. I construed this to mean that under the Roentgen stimulation of the blood-making organs the embryonic myelocytes were manifesting the normal tendency to evolve into the mature polymorphonuclear cells. The blood picture ultimately became that of a mild leucocytosis.

The blood examination of Jan. 23, 1908, resulted as follows: Red cells 4,400,000, white cells 10,000. Differential count gives polymorphonuclear cells 74 per cent., small lymphocytes 10 per cent., large lymphocytes 6 per cent., transitional forms, 8 per cent., myelocytes 2 per cent.

CASE 6.—F. E., age 41, clerk. Family history negative. Used liquor to some extent for five years. No sickness till present trouble began in June, 1904, when he noted growing weakness and loss of energy. In succession there developed pallor of the skin, loss of flesh (20 lbs.), night sweats, tenderness and enlargement of the abdomen. Dyspnea was marked with even light exertion and weakness made rest in bed necessary.

It was at this time (April, 1906) that I was asked by Dr. G. A. Petersdorf to see the case. The spleen extended downward into the pelvis and to the right of the umbilicus about two inches. It was firm and non-sensitive. Temperature $99\frac{1}{2}$ F., pulse 120.

The blood gave a white count of 380,000, red cells 2,500,000. A differential count at this time gave myelocytes 42 per cent., polymorphonuclears 38 per cent., large lymphocytes 2 per cent., small lymphocytes 7 per cent., eosinophiles 1 per cent., large mononuclears 6 per cent.; the remaining 4 per cent. were transitional forms.

The patient has taken systematic x-ray exposures on an average of once a week since that time. A medium vacuum tube has been placed nine inches from the body, exposures being made chiefly over the ribs, in front and behind. Roentgenization has never been carried to the production of more than a very slight dermatitis. The spleen has diminished two-thirds in size. The pallor, weakness and sweats have disappeared and the flesh has been restored.

The only halt in continued improvement was an attack of acute diarrhea in the summer of 1906. On one day he lost a quart of blood, and on the three succeeding a pint each with very disastrous consequences to his strength.

He has not lost a day from work in a year, and so far as subjective sensations are concerned he has not enjoyed better health in years.

The blood examination, January, 1908, shows: red cells, 4,560,000; white cells, 20,000. The microscopic picture is essentially that of leucocytosis, with a few lymphocytes and very rarely a myelocyte.

CASE 7.—Mrs. L., aged 51, rather a corpulent German woman, was seen in consultation with Dr. E. C. Reyer, April 6, 1906, two days before her death. For a year and a half she had complained of a tired feeling and headaches for which she often took tablets obtained at the drug store. At intervals of thirty to sixty days she had very profuse metrorrhagia, which aroused in the physician's mind a suspicion of malignancy. The gynecologist failed, however, to discover any uterine disorder.

Six weeks before the end, for supposed "biliousness," she obtained at a drug store some laxative tablets of which she took several. In two or three days the gums, tongue and lips became greatly swollen, terminating in extreme ulcerative stomatitis, with foul odor, profuse capillary hemorrhage and very free flow of saliva. This stomatitis, which was thought to be mercurial, improved slowly under local measures, but the patient grew weaker, more anemic. A tempera-



Myelogenous leukemia. Taken before x-ray treatment was begun. Mark shows splenic outline.

ture developed ranging from 100 to 102 F.; there was slight diarrhea, a somewhat enlarged spleen, and the possibility of typhoid fever was taken into account. Iodids in moderate doses produced an eruption which became hemorrhagic. Later numerous bloody extravasations appeared in the skin, but there was no blood in the urine or feces. The lymph glands were not enlarged. From the rapid weak heart action the patient was dyspneic. She manifested great depression, foreboding, and gradual clouding of the sensorium which ended in coma and death.

No blood count was made in this case, as the apparatus was not at hand when the only examination was made. Cover-slip preparations stained made the diagnosis of myelogenous leukemia easy.

The estimated proportion of red to white cells was 5 to 1.

A differential estimation of the leucocytes gave: polymorphonuclears, 56 per cent.; large lymphocytes, 7 per cent.; myelocytes, 30 per cent.; small lymphocytes, 3 per cent.; eosinophiles, 3 per cent.; mast cells and transitional forms, 1 per cent.

CASE 8.—Wm. H., aged 42, barber by occupation. Since the beginning of the Spanish-American war until November, 1906, he was a soldier in the U. S. Army. Served in Cuba and afterward in the Philippines. Within the past two years he served as a helper in the U. S. Hospital for tubercular cases in New Mexico. Had pneumonia a year ago, at which time the enlargement of the spleen was first noticed. He suffered repeatedly from malaria and dengue fever while in Cuba. For two years past has had progressive loss of weight, weakness, pallor (almost a lemon tint), cough, sweats and dull persistent pain in the left hypochondrium. Since the attack of pneumonia a year ago the foregoing symptoms have become more pronounced and there have been added palpitation, dyspnea, edema, fever (temperature often reaching 103 F.) and great splenic enlargement. Physical examination, Jan. 2, 1908, revealed a spleen extending into the pelvis and two and a half inches beyond the umbilicus on the right. The blood examination gives hemoglobin, 30 per cent.; white cells, 335,000. There are a great many nucleated red cells, and the myelocytes are in excess of 40 per cent. X-ray treatment has been begun, but it is too early to expect any material change in the blood findings (notes of January, 1908).

CASE 9.—W. N., aged 37. Farmer. Referred to me by Dr. J. E. Nixon. Good family history. When 5 years old suffered from a prolonged siege of malaria with pronounced "ague-eake." Has had several attacks of mucous diarrhea, lasting two or three months each time. Had a prolonged attack of rheumatism ten years ago; also for a month the past summer. It seems likely that this alleged rheumatism of recent date was really a manifestation of his leukemia.

His first knowledge of the present trouble was in May, 1906, when there developed great splenic enlargement and severe pain in that region which lasted for six weeks. From June to December, 1906, he took Fowler's solution, running the dosage up to fifteen drops three daily. He experienced great benefit, regaining weight, strength and the spleen returning almost to the normal size. The organ again began enlarging in April, 1907, and has continued to increase in size despite the renewed administration of iron and arsenic.

Physical exploration to-day (Jan. 24, 1908) reveals a hard, non-sensitive spleen extending to the umbilicus laterally and downward to slightly

beyond the brim of the pelvis. Blood examination gives: hemoglobin, 55 per cent.; white cells, 140,000; polymorphonuclear cells, 44 per cent.; myelocytes, 25 per cent.; small lymphocytes, 13 per cent.; large lymphocytes, 4 per cent.; eosinophiles, 4 per cent.; transitional cells, 10 per cent.

LYMPHATIC LEUKEMIA.

CASE 1.—E. W., school-girl, aged 15. Family history good. Had suffered from no previous disease of significance. During the early spring months she had complained of weakness. The symptom was thought to be connected with the pubescent period. Her parents thought her condition benefited by some osteopathic treatments which she took.

In May, 1906, she came from her home in Oregon to visit friends in Indianapolis. At that time she was exceptionally well. As a proof of her strength and buoyancy of spirits, it may be stated that she climbed a cherry tree. She went for a two weeks' visit to a neighboring town, and while there had several attacks of epistaxis which proved extremely difficult to control. She returned to this city in a fortnight, the hemorrhage from the nasopharynx recurred and continued almost without cessation to the time of her death, ten days later. Topical and constitutional measures were utterly without avail to check the hemorrhage.

I was called by Dr. Frank Manker to see the patient in consultation two days before her death. Although almost completely exsanguinated, her sensorium was clear to the end, but she was blind from brain anemia. There was an unquenchable thirst. The temperature ranged about 100 F. The pulse was very rapid (120 to 150) and scarcely palpable at the wrist. No evidence could be discovered of organic lesion. Neither the spleen nor lymph glands were enlarged. There was no periosteal tenderness. Urine negative. From the clinical aspects of the case neither pernicious anemia nor leukemia was suspected.

The blood examination revealed: hemoglobin, 50 per cent.; red cells, 3,100,000; white cells, 110,000. Differential count: small lymphocytes, 81 per cent.; large lymphocytes, 14 per cent.; polymorphonuclears, 4 per cent.; eosinophiles, .5 per cent.; myelocytes, .5 per cent.

CASE 2.—R. R. T., aged 22, farmer, family history good. Had appendicitis in 1895 and smallpox in 1905. Early in the summer of 1906, while lifting heavily on a binder, he felt something tear and sudden pain in the splenic region. Tenderness persisted for a fortnight. Even after he suffered discomfort at times in that locality. Ten months later he began growing pale and weak, for which the services of a physician were sought without definite diagnosis or benefit from treatment. Six weeks later, July 9, 1907, he

consulted Dr. J. H. Reed, of Logansport. The patient was then almost exhausted from weakness; his pallor was extreme; there were numerous ecchymoses beneath the skin and mucous membrane of the mouth and nose. Legs edematous; dyspnea on slightest exertion; pulse 120; temperature $99\frac{1}{2}$ to 101 F.; leukemia suspected.

This was the condition of the patient when I was asked to see him July 26. Besides the above, a physical examination revealed a tender spleen extending three inches below the left costal margin, but only very slight enlargement of the lymph glands. No osseous tenderness. Soon after midnight the following day he was seized with epistaxis, which was controlled only by pressure after six hours of exhausting hemorrhage. A few hours later bleeding recurred from the nose, pharynx and gums and continued despite all therapeutic measures till his death, the day following.

Blood examination: reds, 2,500,000; whites, 180,000; large lymphocytes, 48 per cent.; small lymphocytes, 43 per cent.; myelocytes, 1 per cent.; polymorphonuclears, 7 per cent.; eosinophiles, 1 per cent.; hemoglobin, 40 per cent.

BOOK REVIEWS

DYSPNEA AND CYANOSIS. By Prof. Edmund von Neusser, M.D., Professor of the Second Medical Clinic, Vienna. Cloth. Pp., 203. Price, \$1.50. New York: E. B. Treat & Company, 1907.

As is stated in the preface to the American edition of this monograph, the diagnosis of diseases in the great majority of patients must be determined at the bedside rather than in the laboratory, and hence the basis for this work is furnished by clinical observations. The volume has been divided into two general parts: First, dyspnea and cyanosis in disorders of the respiration, and, second, dyspnea and cyanosis due to disorders of the circulation. The last four chapters should properly be classified under a third part, as they deal with miscellaneous subjects, no more dependent, perhaps, upon circulatory than respiratory disturbances. The absence of an index precludes somewhat the use of this little volume as a ready reference work, although the volume affords interesting and profitable reading.

THE PANCREAS: ITS SURGERY AND PATHOLOGY. By A. W. Mayo Robson, D.Sc. (Leeds), F.R.C.S. (Eng.) of London, and P. C. Cammidge, M.D. (Eng.) D.P.H. (Camb.), of London. Octavo volume of 546 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

This is a timely book by authors well fitted for the work. The scope of the work is something wider than the title indicates, for the first seven chapters (125 pages) are devoted to the comparative anatomy, anatomy, embryology, anatomical anomalies, surgical anatomy, histology and physiology, respectively. These chapters give a very adequate exposition of the existent knowledge upon the various subjects of which they

treat, and add much to the value of the work. In the chapter on surgical anatomy, speaking of the proximity of the stomach and pancreas, a case of ulcer of the posterior wall of the stomach involving the pancreas is referred to as follows: "A middle-aged man had suffered from symptoms of chronic gastric ulcer for several years with vomiting of coffee-ground material. On exposing the stomach no evidence to account for the trouble could be found, but when it was opened a large ulcer one and a half by three inches in diameter was discovered on the posterior wall, eroding the pancreas." That one might gain a more accurate knowledge of the condition in such a case by opening the stomach is conceded, but that the opening of the stomach was advisable is doubtful, and that it was necessary to the discovery "of evidence to account for the trouble" is denied. Just here it might be well to remark, also, that it is better either to adhere to one system of weights and measures, or to both continuously, rather than use one, then the other, and again both, as is done in this book. To say that a "man of 154 pounds weight might be expected to secrete 175 grams of pancreatic juice a day" sounds queer and looks bad in print. That secretin is the principle excitant of pancreatic activity; that it (secretin) is produced chiefly by the action of hydrochloric acid on the pro-secretin of the cells of the duodenum and jejunum; that the activity of fats as exciters of pancreatic secretion is due to the formation of soap; that the vagus has no secretory fibers seem to be the conclusions reached by the authors. "The milk-curdling ferment of the pancreatic juice is probably not of much physiologic importance." In the chapter on pathology it is stated that as yet the number of cases in which careful macroscopical and microscopical studies of the pancreas have been conducted jointly are so few, that it is impossible to arrive at satisfactory conclusions as to the relative frequency and importance of the various diseases of the pancreas, apart from the clinical evidence. Considerable and important pathologic changes may occur without changes in the gross appearance and inflammation may cause only slight and easily overlooked microscopic changes. The influence of the bile in the production of pancreatitis is established, but how much of this influence is due to micro-organisms and how much to pure mechanical and chemical causes is not known. Fat necrosis forms the subject of one chapter and is discussed in its various phases, apparently with the conclusion that clinically at least it is a result of disease of the pancreas and that the necrosis is due to the fat-splitting ferment. One of the most interesting chapters in the book is that on chemical pathology, in which are discussed the various chemical changes produced in the body by disease of the pancreas. These changes are considered under two heads, those connected with digestion and those connected with internal metabolism. The "improved method" of obtaining the "pancreatic reaction" is described, and while a positive reaction is not regarded as pathognomonic of pancreatitis, it is regarded as "strongly suggestive." The rôle played by the pancreas in diabetes is discussed in a separate chapter. This is followed by a chapter on the general symptomatology and diagnosis, after which injuries and diseases of the pancreas are considered. The bibliography is quite complete. There are few typographical errors. The illustrations are numerous and good. The type, paper, binding and index are satisfactory.

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EDITORIALS

THE DIVISION OF FEES.

The division of fees, or the giving of commissions for cases referred, is a subject which is agitating medical men in many communities in this state, and one upon which *THE JOURNAL* is requested to express an opinion. The editor has repeatedly voiced his sentiments on this subject, and, therefore, should be excused if in complying with the request he reproduces, perhaps in the same words, views which he has previously editorially expressed in numerous numbers of the *Fort Wayne Medical Journal-Magazine*.

The giving and taking of commissions as ordinarily practiced is a species of deception and dishonesty which no right-thinking physician should engage in for one moment. As proof of the fact that it is deception, it is only necessary to say that this traffic is carried on without the knowledge of the patient and with every endeavor to maintain secrecy as to the arrangement. It is a practice that is absolutely dishonest on the part of both the giver and the receiver of the commission, and is as unethical and dishonorable as the practices of the worst of quacks. It encourages deception and fraud, and if permitted to continue and become general, would lower the moral status of the medical profession in the minds of the people.

In some communities where surgeons are freely offering and giving commissions, the practice has developed a species of graft among a certain class of general practitioners which has gone so far that some of them are drumming up surgical cases and writing different surgeons for quotations as to commissions, with the intent of taking the patient to the man who pays the most. We are also informed that the question of necessity for an operation does not enter into consideration providing the patient's consent to an operation is secured. This is the logical outcome of the nefarious business of giving and taking commissions, and the commission-giving and the commission-receiving doctors will come to grief

just as sure as night follows day, for the simple reason that retribution always comes sooner or later to the one who is guilty of dishonest practices.

Fortunately there are many men in the medical profession who are sufficiently conscientious and honest to refuse to give or receive that which they know to be vitally wrong in theory as well as in practice. They recognize the fact that every medical man is deserving of just remuneration for his services, but that it is the duty of every medical man to charge and collect for his services, and not expect or request some one to do it for him. The fees of the surgeon seem large, and are large as compared to the fees of the general physician, but that does not justify a division of the fee to make up for the general physician's shortcomings in not charging and collecting an adequate amount for his professional services rendered. We have contended, and still contend, that the average physician is too poorly paid, and we have endeavored by argument and persuasion to influence many of our professional friends to charge fees that are in keeping with the value of the services rendered. If they have not the good sense and good judgment to do this, then they have no one to blame but themselves, and they should not complain when others obtain adequate compensation, nor should they expect those who do obtain adequate compensation to divide with them. We are firmly convinced that the solution of the whole problem will be the exposure of the practice to the public. Let it once be known that any physician is guilty of giving or taking commissions, and trafficking in the misfortunes of patients, and it will not be long before that physician will lose prestige and practice, and he deserves the fate.

Concerning this question *The Journal of the American Medical Association*, in answer to a correspondent who invites an expression of opinion, has the following logical argument in the issue of Oct. 19, 1907: "Let us get down to first principles: 1. To obtain money for one purpose, even though of itself a legitimate one, under the pretense that it is for another purpose, is to defraud. 2. To defraud is dishonesty. Therefore, it is clear that for the operating surgeon to claim a certain fee from the patient, ostensibly for his own services alone, but really for the family physician as well, is dishonest. Such an act is economically dangerous; for he who repeatedly performs a dishonorable act demoralizes both himself and his associates. The inevitable consequence of such acts will be disregard of the patient's interest as the prime motive

in the selection of the surgeon and the substitution of the consideration as to which surgeon will pay the biggest commission to the attending physician.

"Let us now appeal to first principles to solve the question constructively: 1. Every man is entitled to a reasonable recompense for services rendered. 2. That recompense is due from the person to whom the services are rendered. 3. The responsibility entailed on the physician in deciding on the necessity for an operation and in selecting a suitable operator is pre-eminently a service to the patient. So also are the pains taken to furnish the operating surgeon with all those data that the physician's knowledge and prior observation have enabled him to glean with respect to the history of the case, and the personality and idiosyncrasies, etc., of the patient. And so, also, is the assistance, if any, that may be rendered at the time of operation or subsequently. Therefore, for any or all of these things the family physician is just as much entitled to compensation as for his previous attendance, and that in proportion to the care and responsibility involved. There can, of course, be no ethical objection to the surgeon including the physician's charges in his bill, provided the patient clearly understands that such a division is to take place. But in that case what advantage is gained? And why should the surgeon collect these fees for the physician any more than the fees for previous services. To argue that the only way to secure the physician his just dues is for the surgeon to include it in his own fee overthrows all possible claim for honesty in the transaction. If this alleged objection on the part of the laity really exists, it is because they do not understand the position of the family physician or the amount of responsibility he assumes. The true solution of the difficulty is to make the laity understand the matter. We can hardly refrain, however, from the belief that the difficulty exists mainly in the minds of interested parties, who find the practice of division of fees a means of illicit gain.

"To sum up: First, if the patient knows of the transaction between the surgeon and the attending physician, there is no objection to such a division. If not, it is clearly a dishonest transaction. Second, the giving of commissions is dangerous under any circumstances, because of its inevitable tendency to bias the physician in his choice of a surgeon in favor of the one from whom the most substantial consideration is likely to be obtained. No other factor ought to enter into the physician's decision than the best inter-

ests of his patient. Third, the division of fees, however theoretically different, is practically identical in its effects with the giving of a commission."

HURRIED EXAMINATIONS AND "SNAPSHOT" DIAGNOSES.

A medical man of our acquaintance, who has no assistants, once made the statement that he had given professional attention to forty patients during his afternoon office hours, from 1 to 4 o'clock, and that out of the forty patients ten were new patients who had to have a complete examination. A little mental calculation shows that if the doctor worked without interruption and spent no time in idle conversation he could devote just four and one-half minutes to each case, providing each case received the same amount of attention. Of course, the doctor lied, and he evidently thought that when he told a lie he might as well tell a good one.

But the point is, Are there not many doctors who are trying to give attention to too many patients during the limited time of office hours, and are not the patients being "railroaded" through without receiving proper consideration? How much does the doctor know about the average new case which comes to his office if he gives it only the time ordinarily devoted to new cases when the office is full of waiting patients? How thoroughly can he cover the history of the case, the symptoms, the physical examination and the treatment, if he crowds his work into a limited amount of time in order to get through with a large number of waiting patients? Is it not a fact that a waiting room full of patients, every one of whom presumably means a fee for the physician, is not conducive to good work on the part of the physician, and is it not frequently the case that the busiest physicians are the ones who most frequently do an injustice to themselves as well as their patients by hurried and indifferent work?

There are some physicians who lose sight of everything but the monetary end of the practice of medicine, and the desire to be reckoned among those who have large practices. These men make many "snap diagnoses," or more frequently prescribe empirically. That they obtain satisfactory results in a certain percentage of cases can not be denied, but the practice does not deserve recognition as the right method to pursue or the true attitude to assume. Such men have built up and hold their practices as a result of personality and a studious effort to impress patients with an exaggerated idea of quick perception and

ability. Sooner or later the public comes to recognize the true worth of such men and turns to the physician who, with painstaking care, thoroughness and scientific skill, goes over every case with no thought of time consumed, but with the true physician's feelings that he owes it to himself, to the patient and to his profession to understand thoroughly all the features of every case coming to him before passing an opinion or prescribing a definite line of treatment.

If the time at the disposal of patient or physician does not permit a careful examination, and the determination of such facts as warrant the expression of an intelligent opinion or the prescribing of a definite line of treatment, then it is the duty of the physician to insist upon another appointment, when sufficient time can be taken to make a thorough examination and arrive at definite and reasonably accurate conclusions.

Many very busy practitioners are very thorough and very careful in their work. Such physicians are practicing medicine, first, because it brings a living and, second, because it offers the best opportunity for making a living with the least expenditure of time, energy and brain power.

If a thing is worth doing at all, it is worth doing well, and this holds true most emphatically in the practice of medicine. Hurried and superficial examinations lead to errors in diagnosis which may be avoided if more time and thought is devoted to every case coming to the physician. "Not how much, but how well," should be the motto of every conscientious doctor in the practice of medicine.

SUPPORT THE COUNCIL ON PHARMACY AND CHEMISTRY.

The physicians of Indiana are at the present time being systematically interviewed and "sampled" by the traveling representatives of several manufacturers of proprietary drugs and pharmaceutical specialties. The specialties being introduced have not been approved by the Council on Pharmacy and Chemistry of the American Medical Association, and in one or two instances the manufacturers of these specialties have flatly refused to submit their products to the Council. One of the firms under consideration has rather tartly stated in writing that they do not propose to have their business run by the American Medical Association, and that they do not consider it necessary to secure the endorsement of the Council on Pharmacy and Chemistry in order to dispose of their products.

The truth of the matter is that a firm taking any such stand fears the results of an examination of their products by the Council, for the reason that they know that they are exploiting nostrums and an examination would disclose the facts. No honest firm will hesitate for a moment to have their products examined by the Council and a report of the findings made public. It is the firms that are deceiving the medical profession who are most strongly opposing the work of the Council, and they are receiving support from a certain class of medical periodicals which owe existence and perpetuation to the advertising patronage of nostrum houses.

We believe that the intelligent and right-thinking physicians of Indiana require no urging to prompt them to refuse to prescribe preparations of unknown composition and therapeutic value, and with no endorsement other than that given by the manufacturers. Enough official preparations of known composition are listed in the U. S. Pharmacopeia and National Formulary to fill the requirements of any physician, and in addition to this a large number of new and non-official preparations approved by the Council on Pharmacy and Chemistry of the A. M. A. are offered the profession. There is, therefore, no logical reason why a physician should prescribe any one of the numerous nostrums of unknown formula or composition which are so extensively advertised and the therapeutic action of which is so extravagantly stated by the manufacturers.

The Council on Pharmacy and Chemistry is composed of men of recognized ability and standing and thoroughly competent to pass an authoritative opinion on the composition and character of drugs, chemicals and pharmaceutical specialties. The Council has been organized and established purely with a view to protect the physician as well as the patient, and it is the pleasure and intent of the Council to deal honestly and fairly with the manufacturers. The work of the Council deserves the approval and the support of every member of the medical profession, and that support can be best demonstrated by refusal on the part of physicians to endorse or prescribe any remedy not found in the U. S. Pharmacopeia or National Formulary or in the published list of new and non-official preparations approved by the Council.

SHALL WE CHARGE CLERGYMEN?

A reader of the *THE JOURNAL* asks, "Shall the physician charge members of the clergy for professional services rendered?" Our answer is

yes, and we will ask our readers to give a single logical reason for not charging clergymen for medical or surgical attention.

We are aware of the fact that in many communities it is the custom to render gratuitous medical and surgical services to the members of the clergy and their families, but that does not mean that the custom is right or that we should always adhere to such a custom. The average member of the clergy has an income fully equal to the income of the average skilled mechanic and greater than the income of the ordinary mechanic, farmer, shopkeeper, clerk or laborer. In many instances he receives free rent, and in some instances free light and fuel in addition to his salary, to say nothing of fees for weddings, funerals, christenings, etc. Is it right that we should charge a fee to the common laborer or ordinary mechanic and let our sleek and well-fed member of the clergy off without the payment of a fee? And why does the average physician donate his services to the members of the clergy? Is it because he feels that the members of the clergy can not afford to pay for services rendered? No. He does it either because he has not the moral courage to break away from a vicious custom established by others, or because he really desires to secure the influence of the clergy, and it is generally the latter reason. In other words, the doctor is buying the influence of the clergy, and the average member of the clergy who accepts gratuitous medical services is selling his influence, as he also is selling his self-respect. By accepting gratuitous medical services the clergyman is placing himself under moral obligations to the physician, and by donating the services to the clergyman the physician is placing himself in the position of desiring such a relationship and being willing to pay for it. There is neither justice nor reason in the practice, and we are pleased to observe that there is a steadily increasing number of clergymen who not only expect to pay cash for their medical services, but insist upon doing so in justice to their own moral self-respect.

In our judgment, clergymen should be considered in the same manner as patients coming from any other walk of life. If because of financial circumstances the clergyman is entitled to charity, then he should be granted that charity the same as we grant charity to any one else, but we do not believe it is right to donate services in whole or in part to a clergyman simply because he is a clergyman while we at the same time expect and demand some sort of fee from the

man who earns but a dollar and a half per day and perhaps has a large family to support from his earnings. Our religion is not of that kind.

THE MEDICAL ABORTIONIST.

The special committee appointed by the Chicago Medical Society to investigate criminal practices roughly estimates that 50,000 criminal operations are performed annually in Chicago, and that there are 150 private hospitals and maternity homes in which these practices are carried on and the born and unborn infants destroyed.

What an appalling slaughter of human life, and what a reflection upon our courts and legal fraternity that the murderers are not justly punished for their crimes! But it seems almost impossible to convict an abortionist, owing to the fact that it is difficult to secure evidence even reasonably sufficient to insure conviction in a court of law. There are lawyers and doctors who will sell their souls for money, and the abortionist knows that if he is ever brought into court it will be a comparatively easy thing for him to secure acquittal through the efforts of some conscienceless lawyer, aided by the purchased but perjured testimony of some physician. He also feels a sense of security in the thought that he will be shielded by the woman upon whom he has performed the criminal operation, as also by her relatives and friends.

Chicago's record of criminal operations is probably no worse proportionately than the record of many cities and towns in the United States, and the question comes to us all, How shall we reduce this record of crime? To us it seems possible to accomplish much through the efforts of a united medical profession, aided by an improved sentiment in the legal fraternity. When reputable lawyers and reputable doctors put forth every endeavor to convict rather than acquit the abortionist, then and not until then can we expect a lessening of the number of criminal abortions. And the penalty for a convicted abortionist should be hanging or a life sentence.

The average medical abortionist of to-day is a man or woman with limited general as well as medical education, no social or professional standing, and morals perverted. To him or her, criminal practices come easier and bring greater rewards than the legitimate practice of medicine, and the lowered mental caliber is attended by a lessened fear of punishment. Not many men who are compelled to comply with rigid educational and moral requirements in order to gain

legal permission to practice medicine will have the tendency to engage in the performance of criminal operations, and if they have the tendency it will be held in subjection through a wholesome fear of ruined social and professional reputations.

In the future, therefore, much can also be expected from our higher standards of medical education and our closer scrutiny of the moral and intellectual attainments of those who seek entrance to the medical profession.

ECONOMIC QUESTIONS PERTAINING TO OUR PROFESSION DEMAND SERIOUS CONSIDERATION.

No profession is so philanthropic as the medical profession. We are constantly advocating means which will eventually destroy our own usefulness. Through our public health boards, with their lectures and free distribution of literature, we are teaching the public how to prevent and cure disease. We are sanctioning the erection and maintenance of public hospitals and dispensaries for the free treatment of people, 90 per cent. of whom can well afford a physician's fees. We are using our influence to secure free antitoxin injections, free vaccinations, free school inspections, free tuberculosis sanatoria, and numerous other free benefits for the people which directly take from many physicians the means of earning a living. We are countenancing contract practice, which every day is widening its sphere of usefulness to a large percentage of our population, while at the same time lowering the dignity of our profession and exerting a demoralizing effect upon fees in general for professional services. And to cap the climax, the daily papers announce that the courts in some states have decided that physicians have no legal right to fix or maintain uniform fees, while in other states attempts are being made to enact laws permanently fixing a low maximum fee for any service rendered by a physician, and in one state an attempt is being made to enact a law making it compulsory for physicians to charge for time and not for skill.

Is it not time for the medical profession to awake to the danger threatening if we are to be saved from a fate that is little short of reducing our profession to a trade, and that trade so tied down by legal restrictions and so harassed by state and municipal competition from the various free medical benefits that there is left but little upon which the physician can feed? The economic questions pertaining to the practice of

medicine certainly demand attention, and every county medical society can well afford to devote one or more meetings each year to the consideration of such questions.

As medical men we look too lightly upon the commercial side of our work and are quite content to be imposed upon in a most outrageous manner, and in a manner which if it applied to any other profession or calling would not go unnoticed and unchallenged. It is not and should not be beneath our dignity to discuss freely and to act intelligently and thoughtfully upon these questions which are so vital to our personal interests and to the welfare of our families. We are in entire sympathy with the spirit which prompts medical charity for God's poor, but it is the flagrant abuse of the charity and the submissiveness of the medical profession which demand serious attention for our own self-preservation as well as in the interest of justice.

SCIENTIFIC EDITORIAL

LA GRIPPE AND ITS COMPLICATIONS.

Ever since 1889, when influenza became pandemic, there has been frequently engrafted on other diseases a train of symptoms which has given the medical man no end of annoyance in reaching a proper diagnosis. It is a well-known fact that for several years after a pandemic of influenza, commonly called *la grippe*, yes, for many years thereafter, at irregular intervals, a modified form of this disease has made its appearance in our cities and assumed the proportions of true endemic epidemics, whether the underlying bacteriological factor has been the same (*bacillus influenza*, Pfeiffer) or whether it has been a modified form of *influenza nostras*.

The past eighteen years have established the fact that a disease contagious in character, simulating true influenza, has been added to our list of human ailments, that this disease is more than a common cold or catarrhal fever, and that it greatly disturbs the symptom-complex of other diseases similar in character or entirely foreign to its etiology. This disease is again with us this year, or has been within the past two months. Those communities from which it has departed are thankful, but are yet suffering from its effects, and this brings us to the purpose of these remarks.

Physicians who were in practice in 1889 and 1890 will remember what consternation was created in their respective communities when the first case of influenza manifested itself—the

panic-like fear which held that community in its grasp while the epidemic continued. No one but the doctor knew what to do, and even to him the new disease was a mystery as to etiology and treatment. Repeated epidemics since that time have familiarized the public with the symptoms and treatment of a one-time dread visitation. Fear of its consequences has been lulled to sleep, for has not the corner druggist a supply of "grip pills" and headache powders? Even the everyday physicians have permitted themselves to assume an indifferent attitude and have acquiesced in the popular assumption that la grippe belongs to the category of mumps, whooping cough and measles, for which no particular treatment is required except hot drinks, a foot bath, some cough drops and a laxative. In many cases this may be all that is needed, and the public can not be compelled to employ licensed physicians to treat what may appear as a trivial indisposition.

The writer, whose practice extends over fully twenty-five years, believes that he can see a marked change in the symptom picture of disease before and after the advent of true influenza eighteen years ago and its succeeding recurrent epidemics, not only in affections of the respiratory organs but in diseases foreign to the pulmonary system.

Whenever an epidemic of la grippe, even in light form, invades a community physicians should be prepared to encounter the most atypical forms of bronchitis, broncho-pneumonia and lobar pneumonia, unusual manifestations of gastro-intestinal disorders, an increase in the attacks of nephritis, atypical cases of rheumatism, and after the subsidence of the epidemic a harvest of empyemas and pulmonary tuberculosis, and among children hypertrophied tonsils, adenoids and mastoid disease.

The reader might imagine us extremists who would tinge every indisposition with the malign influences of la grippe. It is not our intention to be too insistent, but simply to point out to the busy practitioner the necessity of being on guard in estimating the possible distortion of diseases comparatively easy of diagnosis under normal conditions but frequently perplexing during epidemics of this latter-day visitation.

Probably no disease has so nearly approached the white plague in its mortality, and occasionally exceeded it, as pneumonia, and this only of late years. Pneumonia has been steadily on the increase without any satisfactory explanation except that it is a favorite complication of la grippe. And how insidiously it comes on the scene, not with a chill, high fever and typical bloody

sputum, but after two or three days of la grippe, slight pain, sometimes none, consolidation of a lobe, scanty sanguino-purulent expectoration, moderately high temperature, frequently albuminuria and rheumatic pains. The usual therapeutic measures are of no avail, no matter what favorite treatment be adopted, whether quinin in massive doses, cold or hot applications, or veratrum, the disease does not terminate by crisis, but lingers on like the last days of typhoid.

Empyemas during la grippe epidemics are more frequent as a complication or sequela of pneumonia than at other times. It is the writer's honest opinion that statistics, if available, would prove that empyemas have been more frequent in the last twenty years than prior to that period—not as a primary complication of la grippe but as a sequela of pneumonia during epidemics of the former—at least this has been the writer's personal experience. During this past epidemic as it appeared in his community the writer has observed an unusual manifestation of gastrointestinal disturbance, protracted nausea and vomiting, persistent diarrhea without much pain and with the prostration of cholera nostras.

When the epidemic disease attacks children all the usual points of vulnerability are extremely affected. The vocal cords become so edematous that membranous croup is suspected, and aural symptoms are the rule. Coryza of an extreme type is present, also an irritable cough persisting for weeks, and as sequela hypertrophied tonsils and adenoids. After every epidemic of la grippe the specialists' offices are crowded for months afterward with tonsillar affections, elongated uvulae, adenoids, middle-ear diseases, frontal sinus disease and affections of the ethmoidal cells. An unusual mortality constantly prevails among persons over 60 years of age during the la grippe season.

Any pre-existing ailment is marked by exacerbations. The sufferers from rheumatism experience renewed and violent attacks. Those affected with cardiac affections rapidly succumb. Chronic invalidism of every form is but an open door inviting this grim spectre to commit his depredations. It goes without saying that tuberculous patients are exquisitely sensitive to the infections of la grippe. After an epidemic the number of deaths in the course of the following year is markedly increased.

The writer can not better express his views than by stating that he believes that concurrent and intercurrent diseases during an epidemic of la grippe such as has prevailed throughout Indiana, and is still prevailing in many localities,

should be considered and treated as mixed infections, and it is of small consequence whether la grippe is the primary affection or whether it is engrafted upon some other acutely or chronically existing disease.

JOHN B. BERTELING, South Bend.

EDITORIAL NOTES

ONE of the prominent physicians of the state writes us: "THE JOURNAL as compared to the old transactions is like comparing a live man to a corpse."

THE JOURNAL has already been the means of bringing many new members into the state association. We hope that it may continue to stimulate interest in our organization.

WE WANT reporters for our columns devoted to medical news notes and personals. Send us marked copies of newspapers or write out the items. We prefer to know the name of the sender in every instance.

REMEMBER our advertisers. With their patronage they are helping us to publish a larger and better journal than otherwise would be possible. Give them your support, and when doing so mention THE JOURNAL.

PUT little confidence in the doctor who introduces the name of some new pharmaceutical specialty into his paper. He generally recommends the new remedy because he has received or expects to receive a consideration for so doing.

REV. JOHN THOMPSON, of Chicago, thinks that the Christian Scientists should not be allowed to monopolize the act of healing, and he predicts that the Methodist Episcopal Church will some day practice the art of healing the sick. Of course there is a crying need for a few more fakers pretending to heal the sick under the cloak of religion.

DR. E. P. THOMAS, of Bowling Green, Ohio, is looking for dupes among the medical men of Indiana. He offers "to the profession only" forty-five recipes for the small sum of five dollars. Many of the recipes are for concoctions which the enterprising old faker says are "sure cures" for some of the incurable diseases, and every one is offered as a winner.

How often we hear the expression, "The doctor said I came very near to having typhoid," or "The doctor said I had a 'touch' of pneumonia." In this age of definite diagnosis of the infectious and contagious diseases it is time for some of the doctors to catch up with the procession and understand and know that a patient definitely has or has not one of the communicable diseases.

THE secretaries of county medical societies have recently received a letter from Dr. G. W. H. Kemper, chairman of the Committee on Necrology of the state association, asking them to report all deaths of members of their respective societies to the editor of THE JOURNAL for publication. These reports should be sent in promptly, and whenever possible the newspapers containing the obituary notices should be mailed to us.

IN THE proceedings of the Indianapolis Medical Society, published in this number of THE JOURNAL, is an account of a death from hyoscin, morphin and cactin anesthesia. How many more reports of similar character will it require to prove that hyoscin, morphin and cactin anesthesia is very dangerous and should not be employed? The record of published and unpublished deaths directly due to this treacherous form of anesthesia should be sufficient to condemn the practice of giving hyoscin, morphin and cactin.

SOME of the physicians who received a copy of our January number have not been sent a copy of this number. This is due to the fact, as pointed out in our January number, that the postal authorities do not permit us to send THE JOURNAL regularly to any but paid subscribers. No one who has not paid his dues to the state association for 1908, which includes a subscription to THE JOURNAL, can expect to receive THE JOURNAL regularly. Secretaries of county medical societies should impress this fact upon the members of their respective societies.

WE WISH again to remind our county secretaries that reports of meetings of their respective societies should be sent in promptly. This number of THE JOURNAL should contain the reports of all county society meetings held during the month of January, but many of the January reports arrived too late for insertion in this number. As the success of our department devoted to society proceedings depends in a large

measure upon the promptness with which we receive reports from county secretaries, we hope that we may have the cooperation which we ask.

IT HAS been recently announced that Mother Eddy, founder and high priest of the Christian Science Church, has decided to devote \$1,000,000 of her fortune to establish a school and charitable institution in Boston. Following close after this announcement comes another announcement to the effect that the trustees of Mrs. Eddy's fortune forbid the use of such an appropriation or any other appropriation for the founding of a charitable institution. All of which reminds us that the Christian Scientists as a class are not very strong on the practical application of charity, and the Christian Science healers as a rule make short work of the patient who is unable to pay a fee for services rendered.

WITHIN twenty-four hours after mailing our January number we began to receive telegrams and letters from almost every section of Indiana offering congratulations and expressing words of praise for *THE JOURNAL*. Several editors of medical journals in other states have also written letters of felicitation, and even a few of our advertisers have felt called upon to extend compliments and express their appreciation. We are pleased to know that the initial number of *THE JOURNAL* has given such general satisfaction, and we sincerely hope that this and future numbers will merit a continuance of the interest and appreciation already shown.

The "Boy Phenomenon," who has been advertised in some of the Indiana towns as possessing wonderful magnetic healing powers, but who in reality was the rankest of swindlers, has been driven out of the state by the Board of Medical Examination and Registration. The doctor who was employed by the "Boy Phenomenon" has been cited to appear before the board and show cause why his license shall not be revoked for gross immorality in that he has become a party to a scheme to defraud and deceive the credulous sick and obtain money under false pretenses.

The board deserves great credit for this work, and we hope that some of the other notorious quacks and medical pretenders who make Indiana their home will be investigated and their licenses taken from them unless they change their tactics.

ANY person who has suffered repeated attacks of quinsy and follicular tonsillitis, to say nothing

of earache and perhaps suppurative otitis media, and who has been free from such distressing manifestations for a protracted length of time as a direct result of thorough removal of the tonsils, will have little faith in the old theory, now being revived by some writers, that the tonsils have a beneficial function and, therefore, should not be removed. Theory is all right in its place, but in the end it is the practical results which count. If the Creator had intended a pair of large tonsils to have a beneficial function, some of us have been slighted, and the good results succeeding the removal of tonsils in thousands of sufferers show that the nearer we come to having no tonsils the nearer we come to being free from numerous painful if not dangerous affections.

VIN MARIANI, a nostrum at present advertised in some of the prominent medical journals of the country and formerly advertised in the lay press, is now claimed to be absolutely free from cocaine. Before the National Food and Drugs Act went into effect Vin Mariani was put up under a label which distinctly stated that the preparation was not a cocaine preparation. After the National Food and Drugs Act went into effect Vin Mariani came out under a label which announced "Seventeen per cent. alcohol by volume—Each ounce represents one-tenth of one grain of cocaine." The exploiters of this fraudulent preparation recommend it as good for almost every ill to which flesh is heir, and they wind up by saying, "When everything else has failed try it to prove merits." And some medical journals have thrown aside the cloak of respectability and continue to advertise Vin Mariani after the disclosure of such a record.

REV. CORYDON MILLARD, of Milwaukee, highly recommends Duffy's Pure Malt Whiskey because it makes him feel younger. Preacher Millard does not say how much Duffy's "fire water" he is in the habit of taking, but we can readily understand that if he takes enough of it he will feel hilariously younger and perhaps have an inordinate desire to preach overtime on account of his temporarily renewed mental and physical vigor. Perhaps he also recommends Cascarets for that "dark brown taste" of the morning after. Anyway, we admire Rev. Millard for his frankness, and wish that there were more members of the clergy who would admit that they regularly take "booze" in the form of such atrociously bad cocktails as Hostetter's Bitters, Peruna (the women's favorite toddy) and a score of other

patent medicines which owe their virtue and their enormous sale to the fact that whiskey forms a large part of the ingredients.

EVERY county medical society in Indiana should purchase from fifty to five hundred reprints of Samuel Hopkins Adams' series of articles on the nostrum evil and quacks, entitled "The Great American Fraud," and distribute them gratuitously among influential people. The articles first appeared in *Collier's Weekly*, but have been reprinted in book form by the American Medical Association and will be furnished at cost in quantities for free distribution. Fifty copies may be secured for two dollars, one hundred copies for four dollars, and five hundred copies for eighteen dollars. No society is so poor that \$2.00 can not be expended in purchasing fifty copies for free distribution as an educating influence. Nothing has ever done so much to acquaint the public with the real evils of the patent medicine and quack doctor methods, and the exposure should be given the widest publicity in the interest of suppression of the evil.

TO THE SECRETARIES OF COUNTY SOCIETIES.—The American Medical Association officials long ago urged that all the changes occurring in the membership of the county societies should be reported immediately to the secretary of the State Association, and cards for this purpose were sent to the county society secretaries. Unfortunately but few of the cards have been used, and, in spite of frequent requests, most of the officers have only reported the changes at the time of their annual report. The establishment of THE JOURNAL furnishes an additional reason for putting these changes on record as soon as they occur. All of the secretaries of county societies, therefore, are hereby urgently requested to inform the undersigned of any death, removal, expulsion, withdrawal or admission of members whenever such change takes place, instead of waiting for the annual report, such information to be given either by letter or on the cards furnished for the purpose.—F. C. HEATH, *Secretary Indiana State Medical Association*.

DR. McCORMACK has been working in the eastern states since leaving Indiana, and from every city and town where he has spoken come reports of large and enthusiastic meetings. He has been introduced to his audiences by governors, congressmen, judges, clergymen, college presidents and prominent business men, and his

instructive talks, given in a pleasing but forceful manner, have done much to awaken a sentiment favorable to a more general recognition of the great work for humanity being done by the medical profession. With a better understanding between the profession and the laity it will be possible to secure greater cooperation of laymen in efforts to conserve the lives and health of the public. It is regretted that we have no more McCormacks to put in the field, for there is room for a dozen such workers, and the American Medical Association never did a better thing than to start this evangelistic work with the public. With the public educated as to what may be accomplished it will be possible for the medical profession practically to stamp out many preventable diseases.

THE State Board of Health is sending out circular letters to the county councils and county health boards of Indiana, urging that everything possible be done during this year to prevent the spread of disease. The letters call the attention of the officers to the fact that the protection of the public health is of first and utmost importance, and the county councils are urged to make liberal appropriation for the prevention of disease. In the letters the following resolution, adopted recently by the New York City Board of Trade, is quoted:

"Health and the protection of life are more precious to the people and more necessary to their happiness than even the extension of our commerce, the fostering of our agricultural interests, the solving of our financial problems, the cheapness or efficiency of our postal service, the improvement of our rivers and harbors or the enlargement of our navy."

The letters also say that the first step in the protection of the public health is to collect vital statistics. The health officers, the letters say, must know about the deaths and contagious diseases before they can find the enemy intelligently.

STRANGE things happen in this world. A noted Indiana author gets "fuller than a goat" on various brands of "fire water," becomes hilariously boisterous, then pugilistic in his demeanor, tries to thrash two policemen and nearly succeeds in doing it, is carried to the police station in a carriage, permitted to go on his own recognizance, and the next day the court allows the episode to pass as though it had never happened. An ordinary laboring man with half as much "jag" would have been beaten into insensibility for striking an officer, carted to the police

station in the patrol wagon, thrown into a cell, and the following morning would have found him sentenced to jail at hard labor for three to six months. But the strange part of the whole proceeding is that the supposed noted author was not the author at all, but his double, who really should have been dealt with severely, as is the case when ordinary mortals get into trouble with police officers. The real author is reported by sympathizing friends as having been home on the evening in question, where he played dominoes with his Sunday-school teacher, after which he read Bunyan's "Pilgrim's Progress" and his prayer book until time to retire at 3 a. m.

THE Committee on Medical Education of the American Medical Association, after careful investigation, has rated all of the medical colleges of the United States on a percentage basis as regards equipment, course of study and requirements of students, and general qualifications for teaching medicine and granting the medical degree. A rating of 70 or above has entitled the college receiving such rating to be listed among the colleges approved by the committee. The ratings of the committee have been accepted by a majority of the state medical boards of examination and registration.

Our Indiana board has shown a disposition to refuse to accept the ratings of the committee. This, we believe, is a serious mistake and one that has a tendency to place the board in the position of favoring a lowering of the standard of medical education. The fact that some of the medical colleges of Indiana have not been proven worthy of a rating sufficient to secure entrance to the list of colleges approved by the committee should not for one moment deter the Indiana Board of Medical Examination and Registration from accepting the ratings of the committee. Any medical college in Indiana which can not prove itself worthy of a rating entitling it to entry upon the committee's list of approved medical colleges is not entitled to recognition by the Indiana board, and any leniency shown such a college is a reflection upon the integrity of the board.

THERAPEUTICS is a neglected art. If one does not believe it let him read the physicians' prescriptions in any drug store. Hundreds of ready-to-use remedies and nostrums are prescribed by the average doctor without a knowledge of what exact therapeutic effect is to be obtained from their administration. More often the doctor does not know the ingredients he is prescribing,

but accepts the word of the manufacturer that the proprietary concoction is good for this or that ailment and he prescribes accordingly. It is an easy way to practice medicine, and the doctor is willing to accept anything which offers a means of accomplishing results without the exercise of much judgment or thought on his part. A reason for this practice is that the average doctor is ignorant of the real action of many useful drugs and he knows that he would display his ignorance if he attempted to be his own judge as to what drugs or what combination of drugs are indicated to meet certain pathological conditions. The fault lies with our medical colleges, where too little time and attention is devoted to the study of materia medica and therapeutics. No man should receive his medical degree until he has been thoroughly trained in this branch, and it would be a good thing if he were taught to consider it beneath professional dignity and standing to prescribe anything but preparations the ingredients and quantities of which have been selected by him as a result of accurate knowledge of their therapeutic action.

AN ARTICLE by Dr. G. Stanley Hall on sexual instruction of boys and girls, which appeared a few months ago in the *Ladies' Home Journal*, has aroused considerable discussion, both pro and con, of this interesting subject. Dr. Hall advises explaining the phenomena of reproduction, especially maternity, to boys of 7 years of age, and couples the advice with the statement that there is a great deal of private vice which could be prevented if boys and girls received sexual instruction at a comparatively early age.

We believe that sexual instruction should be given to boys and girls by the parents, but we seriously doubt the propriety of giving that instruction before the age of puberty. It is a delicate subject and one that will not be properly understood by the boy or girl of 7 to 9 years of age, and it is even questionable if such information would not stimulate an unhealthy curiosity which would be satisfied at any cost. Some children may be precocious and naturally inquisitive concerning sexual subjects, but such are the exception rather than the rule, and should be dealt with accordingly. We are inclined to believe that the best plan to pursue is to encourage healthful activity. Keep the boy or girl busy with honest work and wholesome amusement and direct attention away from sexual subjects during the years preceding puberty. If children are encouraged to confide in their parents, and to obtain companionship as well as wholesome advice

from parents, it is not difficult to keep the average child's mind free from that inquisitiveness and curiosity concerning sexual questions which Dr. Hall seems to think occupies the mind of the majority of girls and boys at 7 to 9 years of age and has to be satisfied.

THE Huntington County Medical Society has passed a resolution requesting the newspapers of the city and county of Huntington to omit the names of the attending physicians when publishing news concerning the sick and injured. While the resolution did not meet with the approval of the newspapers, they acceded to the request to the extent that they agreed not to publish the names of physicians unless requested to do so by the physicians interested in the cases reported for publication. But, sad to relate, a few members of the society were opposed to the resolution and have now declared their intention of giving up membership in the society rather than submit to the wishes of the other members. As an evidence of their attitude these men have since permitted, if not requested, their names to appear in local papers in connection with sensational reports of successful operations or treatment.

In our opinion the best plan to be pursued by the Huntington County Medical Society is to take these erring brothers at their word and permit them to relinquish their membership in the society. The society can never be benefited by having on its membership rolls the names of men who so brazenly display their want of self-respect and respect for the medical profession, and who are so admittedly willing to adopt the methods of the quack and medical pretender. We can forgive the man who has done wrong and when his error has been pointed out is willing to make amends, but we do not believe in showing leniency to the man who, knowing that he is wrong and being importuned by his friends and associates to change his course, not only persists in wrong doing, but attempts to make it even more objectionable. The medical men of Huntington who acknowledge that they prefer to advertise themselves in connection with the cases they treat may be termed undesirable members of the medical fraternity, and unless they are willing to conform to the reasonable and right regulations which any physician of self-respect is bound to uphold then the sooner they join the ranks of the advertising fakers the sooner the respectable element in the medical profession will be rid of factors which do not add to its betterment.

DEATHS

Deaths of Indiana Medical Men.

DR. CHARLES BURNER died at his home in South Bend early in January.

HENRY N. KARCHNER, M.D., Central College of Physicians and Surgeons, Indianapolis, 1899; died suddenly in his office in Indianapolis, from heart disease, January 12, aged 34.

LOUIS KERN, M.D., Medical College of Indiana, Indianapolis, 1870; one of the oldest practitioners of Howard County, Ind.; died at his home in Kokomo, January 10, from senile debility, aged 76.

JOHN K. SMALLEY, M.D., Medical College of Indiana, Indianapolis, 1882, Jeffersonville Medical College, Philadelphia, 1887; at one time a member of the county board of pension examining surgeons; president of the First National Bank of Hartsville, Ind., died at his home recently and was buried January 3, aged 58.

DR. JOHN A. COMINGOR, for many years a practitioner in Indianapolis and at one time professor of surgery in the Medical College of Indiana, died January 8, 1908, in his eightieth year, at the home of his daughter in Davenport, Iowa, where he has resided for the past two years. The funeral took place in Indianapolis, Jan. 10, 1908.

DR. W. T. VARNER died at his home in Evansville, January 30, aged 39 years, from a paralytic stroke induced by uremic poisoning accompanying acute nephritis. He leaves a widow and three children. He was one of the well-known physicians of Evansville, having located there immediately after graduating from the Barnes Medical College at St. Louis in 1896. He was born in Spencere County in 1866. Following his completion of the common schools he entered Indiana University, from which institution he graduated with the A. B. degree in 1891. Before entering the medical profession he took up the vocation of school teaching, and for several years served as the principal of schools of both Troy and Dale, Ind. In 1890 he was married to Miss Frances Salm, of Troy, Ind. For a number of years Dr. Varner served as city physician of Evansville. He was known as a man of strong principles and upright character, a member of his county medical society, the Indiana and the American Medical Associations.

DR. LEWIS KERN, dean of the medical profession in Howard County, died at his home in Kokomo, Jan. 14, 1908, aged 77. Dr. Kern was born in Virginia in 1831. When 7 years of age he came with his parents to Shelby County, Ind., and later, while still a young man, came to Howard County. He taught school and studied medicine, finally taking up practice in Alto in 1852, moving to Kokomo in 1878. At the time of his death he was an honorary member of the Howard, Tipton, Cass and Miami County Medical Societies. Having located in Kokomo at the time when that section was a part of the Miami reserve, he was one of the oldest and best known practitioners in the county and enjoyed the high esteem of his fellow practitioners and the community at large. He was a man true in his fidelity to professional integrity and to his friends.

PERSONALS

DR. R. T. COOK has located at Bowling Green, Clay County.

DR. R. H. ROSS, formerly of Cassville, is now located in Kokomo.

DR. J. C. GIFFORD, of Brazil, is spending the mid-winter at Manatee, Fla.

DRS. J. H. ROSS and L. A. SIMON, of Kokomo, are in Florida for the winter.

DR. GEO. D. MARSHALL, formerly of Young America, has located in Kokomo.

DR. B. F. SPELLBRING has removed from Brazil to Saline City, his former location.

DR. WILLIAM S. LEITER, Claypool, was injured in a runaway accident, January 14.

DR. JARVIS J. HOWES, late of Bowling Green, has located in Sellersburg, Clark County.

DR. JOSEPH SAUNDERS, Anderson, is reported to be critically ill with cerebral hemorrhage.

DR. H. N. MILLER and MISS FLORENCE RAFF, both of South Bend, were married February 8th.

DR. CHAS. W. FRY, of Huntington, has been elected county health officer of Huntington County.

DR. GEORGE J. STUDER, Fort Wayne, has been appointed examining surgeon of the police department.

DR. LEONARD F. SCHMAUSS and family, Alexandria, returned January 10, after five months in Europe.

DR. J. AARON MEINER has been appointed health officer of Alexandria, vice Dr. Augustus R. Schaefer, resigned.

DR. WILLIAM S. CAMPBELL, Lafayette, who is now in California, has been reappointed health officer of Tippecanoe County.

DR. JOHN I. BAIRD, of Albany, is suffering from a partial right-side hemiplegia, due to an attack of apoplexy occurring January 30.

DR. J. F. SMITH, of Brazil, has lately enlarged his hospital, making it thoroughly up to date in every detail. The hospital was established in 1901.

BY THE will of Mrs. Julia Hoefgen, Crawfordsville, her estate, valued at about \$2,500, has been bequeathed to Dr. Jacob B. Etter, her family physician.

DR. WILLIAM F. KING has been appointed secretary of the Columbia City board of health, and Dr. David S. Linville, Columbia City, physician of Whitley County.

DRS. M. H. YOUNG and WILLIAM PALM, of Harmony, are candidates in their respective parties for the office of coroner. Dr. Young is now serving his first term and is a candidate for reelection.

DR. CHAS. F. NEW, of Indianapolis, professor of pathology and clinical psychiatry in the Indiana Medical College, and Miss Mary Ellen Jones, of Columbus, Wis., were united in marriage December 25.

DR. U. H. HOLDER, of Washington, was suddenly stricken with blindness while suffering with la grippe last month, and was taken to Indianapolis and put under the care of a specialist. He has returned to his home with recovery of fair vision in the right eye, but has become totally blind in the left.

DR. HARRY S. HICKS, of Muncie, is charged with being perniciously connected with the "Boy Phenomenon," who claims to cure different diseases by unusual methods. The Indiana Board of Medical Registration and Examination have been asked to take appropriate action. Dr. Hicks, against whom charges have been filed, is a graduate of the Medical College of Indiana, class of 1901. He practiced in Marion previous to locating in Muncie. Dr. John W. White, of Muncie, is reported as having also been connected with the "boy phenomenon" combination, but has severed his connection.— *Abs. Muncie Morning Star*, Feb. 4, 1908.

DR. C. H. ENGLISH, of Fort Wayne, was held up by a highway robber on the night of February 1. The doctor had just stepped out of his house when he was commanded to throw up his hands or have his head blown off. He complied with the request. The thug, in true professional style, turned his victim around and searched the front trousers pockets, securing a small amount of change. The robber proceeded to search the hip pockets, the right one of which contained about \$60. During the proceeding Dr. English gradually edged around until he could grasp the revolver, when a rough-and-tumble fight began, with the physician endeavoring to secure the weapon. The combatants fought desperately for several minutes, neither uttering a cry. At one time the robber wrenched the revolver free and snapped the trigger twice with the weapon pressed against the physician's breast, but the cartridge failed to explode. Finally after a desperate fight Dr. English grasped the highwayman's throat and began choking him, which brought forth a yell for mercy and attracted attention. Several people rushed to the scene and found the doctor kneeling on the highwayman in the middle of the street. Police officers soon arrived and took the highwayman to the police station, and two days later he was sentenced in the circuit court to from two to fourteen years in the penitentiary on his plea of guilty to the charge of highway robbery.

The revolver used by the highwayman was found near the scene of the fight and was fully loaded, but contained rim-fire cartridges while the pistol was a center-fire weapon. The robber is thought to have been the perpetrator of several of the recent attempted holdups in the city. Dr. English is being freely complimented for his courage.

NEWS, NOTES AND COMMENTS

DR. G. W. LEE, formerly of Indianapolis, has located in Greenfield.

THE History of Delaware County, now in press, is authority for the statement that 430 physicians have at one time or another resided in Delaware County.

THE meeting of the Second District Medical Society will be held at Bloomfield, Ind., on May 14, 1908. A banquet will be given by the Greene County Medical Society to the visiting members.

JOHN D. ROCKEFELLER has given \$2,600,000 to form the endowment of the Rockefeller Institute for Medical Research, which he founded in New York six years ago. This gift will insure the continuance and enlargement of the institution itself and provide support for scientists engaged for it in medical research in all parts of the world.

THE La Grange County Medical Society has twenty members. As there are only two other doctors in the county who are eligible to membership and they are expected to join the society at the next meeting, the record of the officers of the La Grange County Medical Society is one to be proud of. We wish that other county societies would make as good a showing.

THE Kokomo Academy of Medicine was organized on the evening of January 11 in the offices of Drs. W. I. Scott and W. J. Martin. The following officers were elected: President, J. O. Garr; vice-president, Edgar Cox; secretary and treasurer, O. D. Hutto; censors, Drs. N. D. Varner, W. I. Scott. The Academy meets each Monday in the offices of Drs. Scott and Martin.

THE State Board of Medical Registration and Examination, at its annual meeting, January 11, elected the following officers: President, Dr. J. Edwin P. Holland, Bloomington; vice-president, Dr. William A. Spurgeon, Muncie; secretary, Dr. William T. Gott, Crawfordsville, and treasurer, Dr. Moses S. Canfield, Frankfort. The board decided not to recognize the Eclectic Medical College of Indiana as an approved institution.

THE Vigo County Medical Society has purchased a stereopticon at a cost of \$125, and

nearly every lecture or paper read before the society is now illustrated by slides, diagrams and photographs. The society has also purchased 500 copies of "The Great American Fraud" for distribution among the teachers of the county.

Some of the other county societies of the state might with profit imitate the example of the Vigo County society.

AT THE regular monthly meeting of the Delaware County Medical Society, Feb. 7, 1908, the following motion was presented and unanimously passed:

"That the society instruct the secretary to write a letter of commendation and congratulation to the editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION in reference to the style, contents and general character of said journal."

DR. G. W. H. KEMPER, of Muncie, is writing an article on "What Indiana Men Have Done for Medicine." Dr. Kemper is the author of several books and papers of historical value, and will undoubtedly write a history of Indiana medicine which will be read with much interest by the medical profession of this state and serve to place on record and preserve many facts which a few years later it would be difficult, if not impossible, to authenticate. Dr. Kemper requests us to say that he desires every physician in Indiana who can give him the name of an Indiana physician—living or dead—who has written a medical book, contributed a valuable article on medicine, performed an unusual surgical operation, or, in fact, done anything unusual in the realm of medicine or surgery, to write him about it.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, devoted to the interests of the medical profession of Indiana, is now issued monthly under the direction of the Council, under the charge of Dr. Albert E. Bulson, Jr., editor, and Dr. Ben Perley Weaver, assistant editor, at 219 West Wayne Street, Fort Wayne. Number 1 of Volume 1, dated Jan. 15, 1908, has just been issued, and shows that this publication at once takes a high rank among its contemporaries. It gives evidence of careful preparation and editing, and we are sure that it will take a strong position in the leading of the Indiana profession in every good line of work. The Indiana journal is to be congratulated on its advertising: we fail to note anything objectionable in the sixteen pages in this issue.—*Journal of the American Medical Association*, Jan. 25, 1908.

THE first number of *The Archives of Internal Medicine*, published by the American Medical Association, was issued in January. It is a magazine of 150 pages, containing no advertising and issued in the best style of the printer's and bookmaker's art. The editorial board consists of such well-known men as Joseph L. Miller, Chicago; Richard C. Cabot, Boston; David L. Edsall, Philadelphia; George Dock, Ann Arbor; Theo. C. Janeway, New York, and W. S. Thayer, Baltimore. The initial number contains nothing but five original articles, but those are of the ultra scientific type and are an evidence of the high class of research work which it will be the mission of *The Archives* to report. *The Archives of Internal Medicine* will be issued monthly and two volumes will be published annually, each to consist of about 600 pages. The subscription price is \$4.00 per year.

SOCIETY PROCEEDINGS

ADAMS COUNTY.

At the regular meeting of the Adams County Medical Society, held on Dec. 13, 1907, the following officers were elected to serve for 1908: President, Dr. H. F. Costello, Decatur; vice-president, Dr. L. L. Mattax, Geneva; secretary-treasurer, Dr. Marie L. Holloway, Decatur. After much discussion it was decided not to adopt the postgraduate course for the present, but as an experiment to take up some review work for a few evenings. Dr. Graham read a very interesting paper on "Conjunctivitis," which was discussed by all present. The meeting adjourned to meet the second Friday in January, 1908.

The society met in the office of J. M. Miller, Decatur, on Friday, January 10. Minutes of the previous meeting read and approved. Dr. H. F. Costello gave a very comprehensive and interesting talk on "Anatomy," which served to take many of the members back to their college days. The meeting adjourned to meet the second Friday in February.

MARIE L. HOLLOWAY, Sec.

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of Jan. 7, 1908.)

Society called to order at St. Joseph Hospital by President W. D. Calvin, with 38 members and guests present. Reading of minutes postponed. The meeting was a regular clinical meeting, and was in charge of Drs. Rosenthal and Bulson, who exhibited cases.

Glaucoma.—Case report and patient exhibited by Dr. Bulson. Patient, aged 64, said that about fifteen years ago he began to notice a halo around lights. This manifestation continued a short time and then disappeared, but was followed by pain at intervals in the right eye. The pain seemed to be periodic, and at times would disappear for several weeks. At first the pain was worse at night, but finally it became just as severe during the day. Vision began to fail several years later and became much impaired three or four years ago, follow-

ing a severe siege of pain. The attending physicians pronounced the trouble glaucoma. Treatment did not seem to stop the progress of the disease, and finally the right eye went totally blind, though it continued to be painful. One year ago the left or good eye began to show symptoms of pain and impaired vision, and suddenly went blind for a few days, but finally became better. Under appropriate treatment the disease seemed to be held in check, but the blind eye continued to grow worse, and was finally removed in order to save him from suffering. Since the removal of the blind eye the eye that was good has failed so rapidly that now not even light is distinguished and the pain in this eye is severe. Dr. Bulson presented the patient for examination, and showed that the socket where the eye had been removed is filled with granulation tissue. The left, or only remaining eye, is congested, has a shallow anterior chamber and dilated pupil, and the tension is decidedly increased. There is also haziness or steaminess of the cornea which prevents ophthalmoscopic examination. Under eserine treatment the pain has diminished to some extent, but has not disappeared, nor has there been any marked diminution in the tension. Dr. Bulson said that he would perform iridectomy with a view to relieving the patient of his suffering and perhaps by a reduction of the tension secure a little vision. He held out little hope of securing anything but a relief from pain, and in case this was not accomplished the only thing left was removal of the eyeball.

In discussing the case Dr. Havice said that all these cases of glaucoma are doomed to blindness unless carefully treated or operated, and even then a large percentage of the cases will go to the bad. He said that increased tension could not always be detected and a diagnosis would have to be made by the ophthalmoscopic examination. This is particularly true in cases of simple chronic glaucoma in which there are no congestive symptoms.

Several questions were asked, and in answer Dr. Bulson stated that the halo around lights is considered a very characteristic symptom of glaucoma. The cardinal symptoms of acute glaucoma are congestion of the eye ball, increase of the tension, shallowing of the anterior chamber, dilatation of the pupil, cloudiness of the cornea, as well as anesthesia of the cornea in some cases. If an ophthalmoscopic examination can be made, cupping of the disc will be detected. In simple glaucoma there is rarely congestion, and oftentimes no increase of the tension, no shallowing of the anterior chamber, no dilatation of the pupil, and the diagnosis has to be made from cupping of the disc and contraction of the field of vision. Myotics are only useful in those cases where they contract the pupil. Operation is of signal benefit in some cases, but fails utterly in others. There is a division of opinion among authorities as to how long myotics should be used before resorting to operative procedures.

Spontaneous Cure of Glioma.—Case report by Dr. Bulson. Patient, aged 29, gave a history of having been blind in one eye from birth. Three or four weeks ago the blind eye became red, painful and tender. When seen a week or ten days later the eye exhibited all the characteristic symptoms of an irido-cyclitis. There were tenderness, injection and subnormal tension. No ophthalmoscopic examination possible owing to the cloudiness of the media. Patient was given appropriate treatment for several days without result. Enucleation was then advised and accepted. On removal of the eyeball a staphylomatous bulging of the sclera and to the

side of the optic nerve was detected. On hardening and cutting the specimen a tumor about the size of a large pea was found in the vitreous chamber, immediately opposite the staphylomatous bulging, and apparently springing from the optic nerve by a pedunculated attachment. Dr. Rhamy, the pathologist who examined microscopical sections, reported that the tumor is a glioma which has undergone degenerative changes, thus indicating what is exceedingly rare, a spontaneous cure. The optic nerve, posterior to the eyeball, was not found diseased.

Dr. Bulson stated that considering the fact that glioma is malignant and generally destroys life, this case is unique, though there are a few similar ones on record and several cases reported in which in children a cure has resulted from excision of an eyeball containing glioma.

Double Herniotomy.—Case report and exhibition of patient by Dr. Rosenthal. Patient, boy, aged 14, operated upon ten days ago and making an uneventful recovery. Commenting on the methods of operation in these cases Dr. Rosenthal said that there were two methods of suture for closing external wounds, subcutaneous and cutaneous. The former makes the better looking wound and is less likely to be infected. As to the operation the speaker said that he preferred the Ferguson operation in operating upon children because there is less trauma to the cord and vessels. He then described in some detail the steps of the operation.

Tuberculous Peritonitis.—Case report and patient exhibited by Dr. Rosenthal. Patient, female, 30 years of age, was operated on one week ago. The diagnosis was one of appendicitis and involvement of the right tube and ovary. Upon opening the belly a tuberculous condition was found. There was a mass of adhesions, and in this was found a sinus containing muco-purulent material. The tubes were removed, as also the appendix. The bowels were found denuded of the serous coat in the region of the tumor and there were numerous tags of adhesions. On account of these, as well as on account of the fistula and the character of the contents, it was thought advisable to resect the bowel, and this was done, the Murphy button being used. Dr. Rosenthal said that in using the Murphy button the incision across the bowel should be in such a manner as to not cut off the circulation. The gut should also be sutured around the button to reinforce the attachment. In the case exhibited, the bowels moved on the following day and have moved through the button ever since. The patient still has the button, but it is expected that it will be passed at any time, though in some cases it is retained for periods of from three to four weeks.

Suprapubic Prostatectomy.—Case report and patient exhibited by Dr. Rosenthal. Patient, male, aged 60, was suffering from the effect of a large prostate. Upon being catheterized more than a quart of urine was obtained. Suprapubic prostatectomy was made. The bladder was found extremely large, reaching to the ziphoid appendix and had a septum in it. The adhesions prevented the patient from completely emptying his bladder. Patient has made an uneventful recovery and is now very comfortable.

Sepsis Following Operation for Retroverted Fibroid Uterus.—Case report and patient exhibited by Dr. Rosenthal. Patient was operated upon and apparently was doing well when she suddenly developed a chill and rise of temperature on every other day. Assuming that she might have malaria quinin was administered in 10 grain

doses, and as this prevented the development of chills and fever for a week, it was thought that the diagnosis was correct. She then began to have chills and fever again, and an examination of the blood shows no malarial organisms. She is suffering from sepsis.

Adjourned. J. C. WALLACE, *Sec.*

(Meeting of Jan. 14, 1908.)

Society called to order by President W. D. Calvin, with twenty-five members present. Minutes of previous three meetings read and approved. The papers of the evening were by Dr. Guy A. Smith, on "Anatomy and Histology of Epithelial Tissues;" Dr. Chas. G. Beall, on "Anatomy and Histology of Connective Tissue;" and Dr. B. W. Rhamy, on "Anatomy and Histology of Muscular and Nervous Tissue." These papers were a part of the postgraduate program adopted for the year.

Motion was made and carried that the committee appointed to investigate the alleged conditions concerning commissions be discharged.

Application of Dr. Kaadt was received and referred to the board of censors. The board of censors reported favorably on the application of Dr. A. E. Fauve, and on motion he was declared elected to membership.

The annual reports of the secretary and treasurer were read and referred to the auditing committee. Motion was made and carried that the secretary communicate with the congressional representative from this district to the effect that it is the unanimous sense of the Fort Wayne Medical Society that suitable remuneration be granted by this Congress to the widows of Drs. Lazear and Carroll.

Adjourned. J. C. WALLACE, *Sec.*

(Meeting of Jan. 21, 1908.)

Society was called to order by President W. D. Calvin, with twenty-eight members present. The meeting was devoted to postgraduate work. Dr. Rawles took up the subject of "Chondroma, Osteoma and Myoma," giving the location, varieties and microscopic and gross appearance of these tumors. Dr. G. Van Sweringen presented the subject of "Fibroma and Lipoma," giving location, varieties and microscopic and gross appearance. He exhibited a number of gross and microscopic specimens to illustrate his talk.

Following the discussion the society voted to hold the next meeting at the assembly room of the court house, at which time the lawyers are to take part in the program.

The secretary then read a list of names of physicians who are eligible to membership in the society. Motion was made and carried that the secretary write a letter to each physician on the list inviting him to become a member of the society. The board of censors reported favorably on the application of Dr. Kaadt, and on motion he was duly elected.

A letter from the Kentucky Medical Society concerning nostrums was read and on motion referred to Dr. Bulson for revision, with request that he present resolutions to the society covering points in the letter.

Adjourned. J. C. WALLACE, *Sec.*

BARTHOLOMEW COUNTY.

The regular meeting was held in the Public Library at Columbus on January 14. The program consisted of an address by Dr. Albert C. Kimberlin, of Indianap-

olis, on the subject, "Pericarditis," with presentation of pathological specimens. The discussion was opened by Dr. A. M. Kirkpatrick. GEO. T. MCCOY, *Sec.*

CLAY COUNTY.

The Clay County Medical Society meets in Brazil the third Thursday of each month. The next meeting will be held on February 20, when Drs. Heath and Kimberlin of Indianapolis will address the society. About half the members of the Clay County Medical Society constitute a medical study club which meets in Dr. Hollingsworth's office each Thursday evening for postgraduate study, according to the plan outlined by the American Medical Association. At the last meeting an interesting and profitable program was offered. Microscopical demonstrations of histological and pathological tissues were made by Drs. Hollingsworth and others, and many interesting macroscopical specimens were exhibited and studied in connection with the reports on tumors as well as in connection with the case reports and demonstrations on the skull while studying the physiology and pathology of brain structures.

The officers of the county society for 1908 are as follows: President, Dr. S. G. Hollingsworth, Brazil; vice-president, Dr. R. W. Hawkins, Brazil; secretary-treasurer, Dr. G. W. Finley, Brazil; censors, Drs. H. J. Pierce, Cloverland; W. H. Orr, Brazil; and F. C. Dille, Brazil; delegate to the state association, Dr. Frederick Nussel, Brazil. G. W. FINLEY, *Sec.*

DAVISS COUNTY.

The special annual meeting of the Daviess County Medical Society was held January 9, at Washington, Ind. Dr. W. N. Wishard of Indianapolis gave an interesting and instructive talk on the "Diagnosis and Treatment of Enlarged Prostate." Papers were also read by Dr. R. J. Danner, of Elnora, on "The Treatment of a Cold," and by Dr. T. F. Spink on "Post-Graduate Work." Dr. C. A. L. Reed, of Cincinnati, had arranged to give a public lecture at the People's Theater in the evening, but illness prevented his coming. At 8:30 p. m. the members and their wives enjoyed a banquet at the Meredith House.

At this meeting Dr. Maude Arthur of Glen Dale was admitted to membership in the society. She is the first of her sex to enter the local field, and is meeting with deserved success. T. F. SPINK, *Sec.*

ELKHART COUNTY.

At the January meeting of the Elkhart County Medical Society the following officers were elected: President, Dr. J. H. Snapp, Goshen; vice-president, Dr. W. A. Stauffer, Elkhart; secretary-treasurer, Dr. Geo. W. Spohn, Elkhart.

FOUNTAIN-WARREN COUNTY.

At the December meeting of the Fountain-Warren Medical Society it was decided to adopt the post-graduate course of study, and as the territory includes several towns with poor facilities for weekly meetings, it was decided to organize a local society in each of the chief towns, with weekly meetings in each. Every three months a joint meeting will be held, at which clinical reports will be presented and the work of the different sections taken up in detail.

C. G. BECKETT, *Sec.*

GRANT COUNTY.

At the regular meeting of the Grant County Medical Society, held on January 28, the committee on post-graduate work made its report which was discussed and favorably considered. The committee on public health and legislation was instructed to ascertain if any candidate for the state legislature held views that were antagonistic to any legislation affecting public health which may be introduced at the next session.

A most excellent paper on "The Effects of Light" was read by Dr. C. A. Warwick, which corroborated Woodruff's findings that in the land of the sunshine here, as under similar conditions in the tropics, the nervous system is markedly affected, and more so in blondes than in brunettes; that light is an active agent capable of doing much good or harm, and that we should be less orthodox in its application and follow more closely natural selection.

Dr. Joseph Maurer read a paper on "Otitis Media," which was illustrated by charts.

O. W. McQuown, Sec.

GREENE COUNTY.

The annual meeting and banquet of the Greene County Medical Society was held at Linton on Jan. 16, 1908. Dr. Potter, of Indianapolis, delivered a brilliant and interesting address on "The Early Recognition of Tuberculosis." A number of distinguished visitors were present from out of the county, and an exceptionally enjoyable and profitable meeting was the result. Dr. August F. Knoefel, of Linton, was elected president, and Dr. Frank A. Van Sandt, of Bloomfield, secretary and treasurer for 1908. The next meeting of the society will be at Switz City on February 13.

F. A. VAN SANDT, Sec.

HANCOCK COUNTY.

The Hancock County Medical Society, at its regular meeting on December 7, elected the following officers for 1908: President, Dr. C. A. Barnes, Greenfield; vice-president, Dr. C. K. Bruner, Greenfield; secretary-treasurer, Dr. E. R. Gibbs, Greenfield; board of censors, Drs. J. A. Comstock, L. B. Griffen and C. K. Bruner.

At the January meeting of the society a paper on "Neuralgia" was presented by Dr. C. A. Barnes. The paper reported some very interesting cases showing remote causes of neuralgia. A general discussion followed. The application of Dr. G. W. Lee was referred to the board of censors.

E. R. GIBBS, Sec.

HUNTINGTON COUNTY.

The regular meeting was held on Jan. 14, 1908. The society placed itself on record concerning newspaper advertising by physicians in connection with news items, by unanimously adopting the following resolutions:

"WHEREAS, The promiscuous coupling of the names of physicians and surgeons in connection with cases occurring in their practices as reported in the press of the city and county of Huntington violates the ethical practices of the medical profession and also violates Chapter II, Article I, Section III, of the Code of Ethics of the American Medical Association, which code has been adopted by the Huntington County Medical Society; therefore, be it

Resolved, That it is the sense of the society that an effort be made to have such violations abolished; and therefore, be it

Resolved, That it be requested of the newspapers of the city and county of Huntington that in the publication of their news in relation to the sick and unfortunate, the names of the attending physicians and surgeons be omitted."

While this resolution did not meet with the approval of the papers, the editors acceded to the request on the society to the extent that they will not publish the names of physicians unless requested to do so by the physicians interested in the cases reported in the news items. A small number of members of the society were opposed to the resolution and have declared their intention of giving up their membership in the society rather than submit to the wishes of the rest of the medical fraternity.

Dr. Ervin Wright read a very interesting paper on "Brain Storm," which was generally discussed.

MAURICE H. KREBS, Sec.

JEFFERSON COUNTY.

The Jefferson County Medical Society had its regular meeting Jan. 5, 1908, and elected the following officers: President, Dr. Chas. Denny, Bryantsburg; vice-president, Dr. Carl Henning, Hanover; secretary and treasurer, Dr. J. Cooperider, Madison. The subject of discussion was "Bronchitis." The next meeting of the society will be held February 19, and the subject for discussion will be "Rheumatism."

J. COOPERIDER, Sec.

MADISON COUNTY.

The Madison County Society has adopted the post-graduate course of study and has been divided into two sections. The first section includes Anderson, Pendleton, Lapel and Perkinsville; the second section, Elwood, Alexandria, Orestes and Summitville. Each section meets weekly, with a joint meeting monthly, at which a review of the work of the month is given. The monthly meeting is migratory, with Anderson, Elwood, Alexandria, Pendleton and Summitville as the meeting places.

VEN H. COOK, Sec.

MARION COUNTY.**INDIANAPOLIS MEDICAL SOCIETY.**

(Meeting of Jan. 7, 1908.)

Society called to order by President Pfaff. Reading of minutes of previous meeting postponed. Applications of Drs. Lindemuth, Shimer and Lowder, having been posted for thirty days, were read the second time and referred to the council. Applications of Drs. Gaylord and Dowd were read for the first time and ordered posted. The secretary-treasurer read his report for the year 1907.

The election of officers resulted as follows: President, Dr. F. B. Wynn; vice-president, Dr. T. W. DeHaas; secretary-treasurer, Dr. R. H. Ritter; councilors to fill vacancies, Drs. S. E. Earp and H. E. Gabe.

Dr. Pfaff, the retiring president, delivered his address, which was an historical review of the work of the society, in which he mentioned the fact that many of the great men in American medicine have gone into larger fields from the halls of the Indianapolis Medical Society. He dwelt upon the opportunities before the society at this time, and in the future to wield a greater

influence in the great problems of public health and social welfare. He made a plea for greater activity on the part of the society in the consideration of these questions.

In view of the feeble health of Dr. W. H. Wishard, and his absence from the city, the secretary was instructed to transmit to him the greetings from the society.

The newly elected president, Dr. Wynn, upon request, made some remarks in which he thanked the society for the honor conferred upon him and emphasized the obligations resting upon each member of the society to do all in his power to advance the interests of the organization.

The selection of a staff for the colored orphans' home was left to the judicial council.

Adjourned.

R. H. RITTER, *Sec.*

(Meeting of Jan. 14, 1908.)

Society called to order by President Wynn. Minutes of previous meeting read and approved. Applications of Drs. Chapman, Witt and Stinger were read for the first time and ordered posted. The council reported favorably upon the applications of Drs. Henry and Wells and the report was adopted. Motion was made and carried that in future no names of physicians be carried upon the membership rolls unless dues have been paid.

The program of the evening consisted of case reports.

Unusual Number of Gallstones.—Case report by Dr. John Kolmer. The patient, aged 40, had suffered from recurrent attacks of pain in the region of the liver, but with no positive evidence of gallstones. Patient was operated on. On opening the gall bladder 417 stones were removed, one of them being imbedded in the cystic duct. Recovery was complete. The interesting features of the case were the number of stones present, the absence of jaundice or any rheumatic or infectious disease, and the age of the patient.

Strangulated Hernia.—Two cases reported by Dr. John W. Sluss. In the first case a man, aged 45, with an old oblique inguinal hernia which he had for years held with a truss, suddenly found that the hernia had descended and was causing him much pain. Taxis failed to reduce the hernia, and as there were typical symptoms of obstruction, including pain, nausea and weak, rapid pulse, patient was taken to the hospital for operation. On opening the sac the gut was found to be blue-black, but there were no greenish color nor erosions of the peritoneal surface. The bowel was opened in the usual way. Improvement was uneventful until the end of the first week, when a cough developed with bronchitis. He died on the ninth day. Autopsy revealed broncho-pneumonia and acute fibrinous pericarditis.

Case two, man, aged 35, with an old hernia, had only in recent months worn a truss, and on the morning he was taken ill he had failed to apply it. The hernia descended and in spite of the pain he went to his work in the kitchen of a hotel and remained there until the middle of the afternoon, when he applied at the dispensary for relief. Attempts at reduction under a general anesthetic were unsuccessful. Although there were no shock, only slight nausea and moderate tympanitis, there was a certain elasticity of the tumor that pointed out the absence of bowel. No bowel was found in the sac, but the omentum was anchored to the bottom of the sac by a firm fibrous cord. A part of the omentum

was resected and the rest reduced. All went well until the fifth day, when the temperature rose to 105. The pulse was not disturbed, there were no nausea, abdominal distension or tension. In a few hours there was a profuse eruption of urticaria which rapidly subsided under intestinal cleansing. Further recovery was uneventful.

Syphilitic Epiphysitis.—Dr. O. N. Torian exhibited a child from the Eleanor Hospital suffering with this disease, and presenting the usual manifestations.

Esophageal Stricture.—Dr. J. V. Reed exhibited a child, 4 years of age, from the Eleanor Hospital, who several years ago swallowed lye, with the subsequent development of an esophageal stricture. Dr. Reed produced a gastric fistula through which the child is being fed with gratifying improvement in the general condition.

Sarcoma of the Groin.—Dr. T. B. Eastman described the removal of a mass from the groin which had been diagnosed as an appendiceal abscess, but which proved to be a sarcoma arising from an undescended testicle.

Ectopic Pregnancy Ruptured Into the Bowel.—Dr. T. B. Eastman reported a case in which he had cut down on a mass in the pelvis which proved to be the sac of an old ectopic pregnancy which had ruptured into the bowel. A resection of the bowel was necessary because of the impossibility of closing up these rents. Since time was a most important element in the operation this resection was done with a Murphy button, and the recovery of the patient was excellent.

Strawberry Seeds Mistaken for Crystals.—Dr. S. E. Earp reported having received some time ago a number of small reddish granules, supposed to be crystals, which were passed in large amounts from the bowel. Dr. Earp sent some of the granules to some of the state institutions, but failed to receive any information from them. After considerable study himself he finally discovered that they were vegetable seeds. Inquiry revealed the fact that many strawberries were grown in the district and were favorite articles of diet.

In the discussion Dr. T. B. Eastman, in commenting on Dr. Sluss' cases, said he had seen several cases of hernia in which the omentum had come down with the bowel, had lapped itself about the bowel, and apparently acted as a cushion or pad, preventing harmful pressure on the bowel.

Dr. D. F. Lee reported a case in which a man had an old inguinal hernia on one side for many years. He slipped on the ice and fell heavily. Shortly afterward he noticed a lump appearing in the other groin. This had some signs of a hernia, but still lacks the necessary diagnostic signs. He is in doubt as to the precise nature of the tumor.

Dr. John Kolmer described a recurrent carcinoma which first appeared as a lump on the groin of a woman aged 38. This resembled somewhat the picture given by Dr. Lee.

Dr. H. H. Weer, referring to the sudden development of abdominal pain, reported the case of a man who was rather suddenly seized with severe pain in the side, which was diagnosed as appendicitis. In a short time he had copious movements of the bowels, in which were found numerous small clumps of crystals of sodium oxybate. The condition was easily recognized as acute colitis. Inquiry revealed the fact that the man had been eating freely and frequently of green fruit and vegetables. Complete recovery occurred after the ordinary medication and change in the diet.

Dr. T. V. Keen reported on the positive results of the Calmette ophthalmotuberculin tests. In one case the reaction could be verified with the ordinary means of physical examination.

Dr. R. H. Ritter spoke of the postmortem findings in one of the cases reported by Dr. Sluss. The external wound was almost completely healed and the peritoneal wound was so perfectly and smoothly healed that it required considerable search and a strong light to find it at all. There were no peritoneal adhesions. Just beneath the hepatic flexure of the colon there was a knuckle of small intestine that showed considerable discoloration of the gut wall next to the mesenteric attachment for a distance of about eight inches. This was the only portion of the bowel showing any lesion whatever, and it was concluded that this was the portion of the bowel that had descended into the hernial sac. This discoloration was not due to necrosis, for the tissue was firm. It was apparently only an extravasation of blood into the tissue. The interesting feature was the location of the loop of bowel after the hernia had been replaced. There was also found an acute pericarditis, and this had not been recognized before death. Scattered through both lungs were numerous small areas of broncho-pneumonia. There was a cough after the operation, which grew worse, and just before death there was a sharp rise of temperature. The history of the patient after the operation was very suggestive. Such a history should always put a surgeon on his guard. A cough, increasing in severity after the operation, with or without a rise in temperature, not evidently due to wound infection and other evidences of illness, in the majority of instances means pneumonia. Acute pericarditis is also often overlooked as shown by autopsy.

Death from Hyoscin, Morphin and Cactin Anesthesia.—Case report by Dr. T. B. Noble. The operation performed was laparotomy. The anesthetist insisted upon using the tablets of hyoscin, morphin and cactin, three of which were given at intervals of a few hours before the operation. The patient came on the table breathing heavily, slightly cyanotic, and the whole body rigid. Ether was administered, and it was thirty minutes before the operation could proceed at all. Even then the abdominal muscles were so rigid as to make all manipulation very difficult, but as it seemed impossible to relax her, he finished the operation with the patient in this condition. The patient went off the table in much the same condition as she came to it. Consciousness was never regained, but the patient died rather suddenly a few hours later, apparently from heart failure. Dr. Noble said that he believed the death was due directly to the drugs used and not to the ether or the direct effects of the operation.

Adjourned.

R. H. RITTER, Sec.

(Meeting of Jan. 21, 1908.)

Society called to order by President Wynn. Minutes of previous meeting read and approved:

Tuberculin Therapy was the title of a paper presented by Dr. W. T. S. Dodds. The speaker said that empiricism in the treatment of tuberculosis is fast becoming obsolete. Laboratory methods and laboratory technique have developed to such a stage of perfection that, assisted by biologic agencies, there is no longer any reason for the haphazard and careless findings tolerated a few years ago. It has taken years of hard labor to place tuberculin in the position to which it

rightfully belongs. The trouble was and is now that the majority of the men who are attempting the use of tuberculin do not understand the reactions which take place in an individual who is subjected to doses of a biologic product as strong and powerful as any of the tuberculin products which we now have at our command. The action of tuberculin is almost exactly opposite to that of antitoxin, because we introduce toxin the same as is already being produced in the tissue by the growth of the tubercle bacilli, while with antitoxin we use a substance which, by its own action, neutralizes the toxin which is being produced by the growth of bacteria in the body. In conclusion Dr. Dodds gave the following rules as a safe and conservative method of producing immunity in tuberculosis:

First, tuberculin should be used in only incipient cases or in purely surgical tuberculosis; second, the initial dose should not be larger than .0001 mg., and he prefers to begin with .00001 mg.; third, the interval between injections can be determined only by the length of the negative phase, which will vary materially in different individuals; fourth, the initial dose should be established if possible by the opsonic index; fifth, if a hypersusceptibility is established then you must rest until this has disappeared, when you can again begin with your initial test; sixth, tuberculin therapy is best given by laboratory men, or at least by clinicians who can control the increase of dosage by laboratory findings.

Opsonins and Vaccines, with Report of Cases.—This paper was presented by Dr. H. S. Thurston. The speaker said that the theory of Wright has been assumed to be correct in regard to the protective bodies designated by him as opsonins. His methods of diagnosis and treatment of certain infectious diseases have been followed. The opsonic index was not taken in all cases because the clinical symptoms were a sufficient guide. In all cases of tuberculosis the opsonic index was taken every other day from ten days to fourteen days and then weekly. Autogenous vaccines were used in practically all cases except in tuberculosis, where Koch's new tuberculin T.R. was given. Stock opsonins were used a few times, but their influence was so little that their use was discarded and autogenous vaccines were substituted. Most cases had single infections and it was easy to isolate the disturbing organisms and make a vaccine. Small doses of vaccine seemed to have given better results than large ones. The dose which gives the minimum local reaction without any general manifestation seems to have the best influence. In five tubercular cases, at first a small dose of tuberculin was given, then the dose was increased in frequency and strength. The cases did not improve but began to grow worse. The tuberculin was then discontinued for a few days, when it was resumed under smaller dosage and with marked improvement of the cases. The use of a preservative in the vaccine has been discarded. The vaccine is diluted to any desired strength and sterilized in glass bulbs blown out of ordinary glass tubing. No cloudiness of solution developed as when a preservative was used.

The report of cases included the combined work of Drs. Reed, Shimer and Thurston. Out of eleven cases of acne, five were reported as well, four improved, and two unimproved. In one case the patient had been suffering from acne for fourteen years, two injections at intervals of a week relieved the patient of the lesions, and there has been no recurrence.

Five cases of furunculosis were reported, all of which are well. In only one of the five cases was a second in-

jection of autogenous vaccine required. At the time of the injections the boils were punctured and cupped, but no antiseptics were employed.

In two cases of chronic urethritis the staphylococcus was isolated, autogenous vaccine was given, and both cases are improved. In one case of suppurating sinus leading down to the kidney, in which the colon bacilli infection was demonstrated, four injections of autogenous vaccine resulted in healing of the kidney wound.

Seventeen cases of tuberculosis were reported. Three were observed for diagnosis. In one case the opsonic index was negative for tuberculosis, and later clinical observations bore out the opsonic findings. In one case nothing definite could be determined by the index. In the third case the opsonic finding was positive, and four weeks later tubercle bacilli were found in the sputum. There was a marked improvement in all cases of genito-urinary tuberculosis and one case is apparently well. A suppurating wound of long duration has healed and remained closed. There has been improvement in practically all the cases of pulmonary tuberculosis. In one case of suppurating tubercular adenitis with sinuses, seven weeks' vaccine treatment has resulted in the closure of two of the sinuses, and the swelling of the glands has diminished at least two-thirds.

In the discussion, Dr. Potter called attention to Koeh's insistence on certain rules in the administration of tuberculin and the careful selection of cases. While the great mass of medical men have discarded the use of tuberculin, a small number have persisted in its use, but without any definite theory as to its action. The great advantage of Wright's theory is that it gives us a definite basis for the use of tuberculin. Dr. Potter said that he used tuberculin both for diagnosis and for treatment, and has had various and anomalous results. Rather strange to say, he has seen most marked improvement from the use of large doses. In several cases he has used a considerable dose for diagnosis with the production of intense reaction. This was later followed by great improvement of the condition of the patient. He has had difficulty in holding and controlling patients through the long period necessary for the satisfactory administration of this procedure. He can hardly believe that in private practice the use of tuberculin will be successful, but in proper sanatoria it promises much. The discovery of Wright is a distinct advance and help in the combat with infections.

Dr. J. V. Reed said that he was convinced from his experience with the vaccines that there is great value in this method, although the whole question is just now in the experimental stage. The danger of doing actual harm is real. In treating local infections some of the older methods will still be employed. Abscesses should be opened and drained, washed out with a normal or stronger salt solution, and if possible cupped. Strong antiseptics should be avoided as they are almost universally anti-opsonins. He reported one case of tuberculosis of the knee in which treatment has consisted wholly in the injection of tuberculin and the application of Bier's bandage. Treatment was begun in August, 1907, and at the present time the case is practically well.

Dr. T. V. Keene described the various varieties of tuberculins on the market at the present time and the manner of making. The opsonic index is valuable in treatment only in regard to the negative phases. The index in tuberculosis is very hard to estimate because of the tendency of the bacilli to clump and cause confusion in the counting. The best indication in treat-

ment is the change in the local physical signs. Clinical signs as a rule are more valuable than the index.

Dr. Tucker of Noblesville is still doubtful as to the choice of tuberculins. At the present time he is treating five cases, using different forms of tuberculin. Treatment has been in progress for eight months, but he still is without conclusions.

Dr. J. R. Eastman said that he had recently been in the laboratory of Wright and Douglas. In surgical and genito-urinary tuberculosis he found that Wright and Douglas did not pay much attention to the index. He believed that a great field has been opened up for further study and progress in our treatment of infections. This matter is taken very seriously by the London surgeons who send many cases to Wright and Douglas. Dr. Eastman called attention to the work of Spingler in Switzerland who is using vaccine made from cultures of bovine tubercle bacilli.

Dr. C. E. Ferguson said that he had recently been in the laboratory of Wright and Douglas and he believed that the statements attributed to Cabot concerning Wright's work in this country should be carefully investigated, and if the statements given out by Cabot are found to be correct, even then the results are subject to explanation. Any one who has done any of this work knows the difficulties of the technic and the necessity of having a perfect emulsion. Wright might have as easily as any one else shown a discrepancy in his results if he had not been able to prepare his own emulsion. The voluminous and accurate records of Wright's laboratory remove any question as to the accuracy of the procedure and prove that experienced and capable workers show a wonderful uniformity of results. Dr. Ferguson stated that the index can be raised in tuberculosis, but it is true that it can not be maintained permanently. The subject is as yet too young to allow any one to condemn or to speak dogmatically about it.

Dr. J. N. Hurty spoke of the careful laboratory work done at the Saranac laboratory, and by von Ruck at Asheville. The work of the latter has been most painstaking and persistent, and has vindicated all the claims made for it. Von Ruck uses the outdoor treatment and the watery extract of tubercle bacilli to produce specific immunity.

Dr. Dodds closed the discussion with a brief statement as to the difficulties of this method of treatment, and emphasized the necessity of a thorough understanding of the questions involved and the various theories of immunity.

Adjourned.

R. H. RITTER, Sec.

MIAMI COUNTY.

The Miami County Medical Society held a regular meeting in Peru January 31. Society was called to order by President E. H. Griswold, with thirty-four members and guests present. Minutes of the previous meeting were read and approved. The question of adopting the postgraduate course was taken up and thoroughly discussed, and on motion it was decided that the course should be adopted and that hereafter the society hold weekly meetings. The president appointed a program committee, consisting of Drs. Carter, Spooner and Goodrick. Dr. Carl, who had prepared a paper for the meeting, was unable to be present owing to the serious illness of his father. Motion was made and carried that the president appoint a committee to confer with the school board with a view

to securing an unfinished and unoccupied room in the basement of the city library for the use of the society.

During the progress of the meeting a short recess was held, during which time the members of the society, together with guests from societies of adjoining counties, organized the Eleventh Councilor District Medical Society.

Adjourned.

D. C. RIDENOUR, *Sec.*

PORTER COUNTY.

The Porter County Medical Society met in regular session in the Woodmen's Hall, Valparaiso, on January 7. Two interesting papers were presented, one on "Intestinal Indigestion," by Dr. E. J. Ball, the second on "Acute Nephritis," by Dr. A. B. Dobbins. Both papers were followed by free discussion. Three applications for membership were rejected on account of unethical advertising in newspapers.

P. R. URMSTON, *Sec.*

ST. JOSEPH COUNTY.

The St. Joseph County Medical Society held a special meeting in South Bend Tuesday, January 28. A very interesting program was presented. Dr. R. C. Shanklin of South Bend read a paper on "One Phase of Race Suicide." The discussion was formally opened by Dr. J. W. Hill of South Bend and Dr. J. C. Fleming of Elkhart. "Surgery of the Gall Bladder" was the title of a paper presented by Dr. Thos. J. Eastman of Indianapolis. The discussion was formally opened by Dr. J. B. Greene of Mishawaka and Dr. C. A. McDonald of Warsaw. Dr. G. W. Spohn of Elkhart presented a paper on "Diseased Conditions Caused by Mouth Breathing: Prevention." Dr. J. A. Cook of Goshen presented a paper on "A Brief Résumé on General Anesthesia." The discussion was opened by Dr. R. B. Dugdale, of South Bend and Dr. W. H. Thompson of Winamac. Dr. A. C. McDonald of Warsaw presented a paper on "Operation of Neuroties; Final Results with Report of Cases." The formal discussion was opened by Dr. Charles Stoltz of South Bend and Dr. W. C. McCutcheon of Cassopolis, Mich. The society tendered a banquet to visiting guests in the evening. The society is now holding weekly meetings and has taken up the postgraduate work as outlined by the American Medical Association.

CHAS. S. ROSENBURY, *Sec.*

SULLIVAN COUNTY.

The Sullivan County Medical Society, at its regular meeting January 8, elected the following officers: President, J. E. McConnell, Carlisle; vice-president, E. M. Deputy, Dugger; secretary-treasurer, E. M. Corbin, Sullivan; delegate to the state association, W. N. Thompson, Sullivan; censors, Drs. E. D. Thixton, Sullivan, J. R. Crowder, Sullivan, and C. T. Briggs, Sullivan.

E. M. CORBIN, *Sec.*

UNION COUNTY.

The Union County Medical Society met in annual session at Liberty, Dec. 4, 1907, and elected the following officers: President, Dr. E. R. Beard, Liberty; secretary and treasurer, Dr. E. P. Weist, Liberty; board of censors, Drs. F. T. Dubois, M. F. Veraker and J. E. Morris; delegate to the state association, Dr. Garrett Pigman, Liberty. Regular meetings will be held the first Wednesday of alternate months, beginning with February.

E. P. WEIST, *Sec.*

WARRICK COUNTY.

A meeting of the Warriek County Medical Society was held in the B. M. A. rooms, Boonville, Dec. 10, 1907. Meeting was called to order by President G. J. Hoover at 10 a. m. Dr. A. M. Hayden, of Evansville, presented a paper on "Some Points in the Diagnosis of Cancer of the Stomach." Dr. Dalton Wilson reported two cases of pericarditis, one of which came to autopsy. The early part of the afternoon session was devoted to business, among other things a committee being appointed to revise the constitution and by-laws, and to report the second Tuesday in January. Dr. E. D. Youngblood then read a paper on "Neurasthenia."

DALTON WILSON, *Sec.*

WAYNE COUNTY.

At the annual meeting of the Wayne County Medical Society, the following officers were elected: President, Dr. O. N. Huff, Fountain City; vice-president, Dr. C. P. Colburn, Richmond; secretary-treasurer, Dr. A. L. Bramkamp, Richmond; censors, Drs. H. B. Boyd, M. F. Johnston and M. E. Hervey. The society has adopted the postgraduate course and through a special committee is taking an active part in a vigorous, systematic campaign for pure milk. Through the influence of the society a federal inspection of all animals slaughtered for local consumption has been secured. A reference library and a pathological museum is being established in connection with the society.

A. L. BRAMKAMP, *Sec.*

FOURTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The third annual meeting of this society was held in Columbus, Thursday, Oct. 31, 1907, with seventy members in attendance. The meeting was formally opened by an address of welcome by Dr. J. D. Marshall, president of the Bartholomew County Medical Society, with response by Dr. L. B. Hill, of Seymour.

Professional Ills.—This was the title of the annual address delivered by the president of the society, Dr. A. J. Osterman, of Seymour. On motion the paper was referred to the publication committee of THE JOURNAL OF THE INDIANA MEDICAL ASSOCIATION. The minutes of the previous meeting were then read and approved, and the treasurer gave his annual report, which was also approved and accepted.

Acute Intestinal Diseases of Children in Summer.—The scientific program was ushered in with a symposium on Acute Intestinal diseases of Children in Summer, to which papers were contributed by Drs. C. W. Gibson, Batesville; A. D. Freeman, Osgood; A. G. Osterman, Seymour; J. K. Hawes, Columbus; and E. U. Wood, Columbus. The papers were all very interesting and instructive, and brought out an extended discussion.

Dr. M. J. Coomes, of Batesville, reported a case of Uterine Sub-Involution with Pseudo-Diphtheritic Complication. This report was freely discussed.

At the afternoon meeting it was decided to hold the next meeting at Madison, and the following officers were elected for the ensuing year: President, Dr. E. D. Freeman, Osgood; vice-president, Dr. Scott Culbertson, Vevay; secretary, Dr. George H. Denny, Madison; treasurer, Dr. James H. Green, North Vernon.

The councilor, Dr. W. H. Stemm, then spoke on the advisability of having two meetings each year, and

this was also advocated by Dr. G. T. McCoy, of Columbus. A motion to hold the next meeting the last Thursday in May, 1908, was defeated.

Inguinal Hernia.—This was the title of a paper by Dr. G. H. Denny, of Madison, which was illustrated by several charts showing the steps in the Ferguson operation. The paper was a very comprehensive one and was well discussed. Other papers on the afternoon program were as follows: Rheumatism, Dr. George O. Cosby, Burns ville; Typhoid Fever, Dr. John W. Benham, Columbus; Pathology and Treatment of Typhoid Fever, Dr. William J. Norton, Hope; Fibroid Tumors of the Uterus, Dr. W. H. Stemm, North Vernon; Hysteria, Dr. R. F. Olmstead, Versailles; The New Anesthetic, Dr. C. F. Kercheval, Greensburg; Anomalies of Obstetrical Practice, Dr. H. F. Davenport, North Vernon; Glaucoma, Dr. R. W. Cochran, Madison; The Use of Inspection in Diagnosing Diseases of the Eye by the General Practitioner, Dr. J. H. Ritter, Seymour; Arteriosclerosis, Dr. M. F. Gerrish, Seymour; Acute Gastritis, Dr. Benjamin F. Armbruster, Columbus; Some General Remarks on Nephritis, Dr. Charles L. Williams, Greensburg; Menstrual Disorders, Dr. G. Butler Hill, Seymour; A Plea for Definite Diagnosis in Disease of the Nervous System, Dr. Curtis Bland, Greensburg; Nasal Catarrh, Dr. J. A. Cooperider, Madison; Oxaluria, Dr. F. M. Mueller, Lawrenceburg.

At the conclusion of the scientific program, Dr. D. C. Peyton, of Jeffersonville, president of the Indiana State Medical Association, was introduced. Dr. Peyton made a few remarks on postgraduate work in the county societies, and this was also followed by remarks in a similar strain by Dr. W. H. Stemm, vice-president of the state association. At the conclusion of the meeting the members and guests enjoyed a banquet at the Christian Church, given under the auspices of the Bartholomew County Medical Society.

JOHN LITTLE MORRIS, *Sec.*

EIGHTH COUNCILOR DISTRICT MEDICAL SOCIETY.

In response to a request from Dr. Kemper, I beg to report to you the following facts about the Eighth Councilor District Medical Society, which was organized two years ago. About 150 out of 184 members of the Madison, Delaware, Randolph, Jay and Blackford County Societies are members of the District Society. It holds its meetings twice a year, in April and October.

The officers of the society are: Dr. G. W. H. Kemper, president; Dr. C. L. Botkin, vice-president; Dr. M. A. Austin, secretary-treasurer. An advisory committee is made up of one member from each of the county societies. Dr. Harriett Wiley, Portland; Dr. U. G. Poland, Muncie; Dr. M. M. Clapper, Hartford City; Dr. C. L. Botkin, Farmland; and Dr. M. A. Austin of Anderson are members of this committee. Membership in the District Society is limited to members in good standing in the county societies. The cost of membership is \$1.00 a year which pays for two dinners, these dinners being a feature of every meeting.

The expense of advertising the district meetings has been met by a pro rata assessment amounting to about \$4.00 a year for each county society. It has been deemed advisable to eliminate from the eighth district the presentation of the customary medical papers, and papers on medical economics are requested of those

who are asked to accept places on the program. Local and foreign talent is impartially utilized to make the meetings a success, and an attendance of 60 to 80 per cent. of the membership has rewarded the officers of the society for their efforts.

At the last meeting, held in Muncie on October 22, Dr. W. A. Spurgeon, of Muncie, read a paper on "How can the State Board of Health and County Medical Societies act together to Improve Sanitary Conditions and Prevent Disease?" Dr. Chas. R. Sowder, of Indianapolis, read a paper on "The County Medical Organization; How to make it Interesting and Profitable." These papers were followed by a free discussion.

The ladies of the High Street Methodist Church served an excellent dinner at 1 o'clock. Following this, Dr. E. G. Reynard, of Union City, responded to the toast, "Ethical Advertising." Dr. Reynard's talk was particularly pleasing and possessed an amount of satire which gave double interest to his views on the subject. Dr. I. N. Trent, of Muncie, responded to the toast, "Some Animals I Have Met." He brought with him his double barrelled shotgun loaded with buckshot for the cheap doctors who take care of the "Eagles," the "Moose," and the "Owls," on a contract basis. Dr. R. O. McAlexander, of Indianapolis, spoke on "Butting In," and made a happy talk on the greater benefits to be derived by utilizing home talent rather than calling on foreign assistance. Dr. J. T. Dicks, of Portland, spoke about the next meeting to be held in Jay County, April, 1908. Dr. A. E. Otto, of Alexandria, was unable to be present on account of illness. He was to have spoken on, "Club Practice." Dr. W. N. Wishard, of Indianapolis, who was to have responded to the toast, "The Doctor In Politics," telegraphed his regrets, having been detained by his professional work.

M. A. AUSTIN, *Sec.*

NINTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The House of Delegates of the Ninth Councilor District Medical Society met at 11 a. m. in the Public Library at Lebanon, Nov. 21, 1907. The following officers were elected to serve for the ensuing year: President, Dr. Chas. Chittick, Frankfort; first vice-president, Dr. W. H. Schulz, Lebanon; second vice-president, Dr. H. H. Thompson, Noblesville; secretary, Dr. George F. Keiper, Lafayette; treasurer, Dr. E. Cox, Kokomo.

Dr. Cox, the treasurer, made his report showing a balance of \$2.71 in the treasury. After auditing it the same was approved.

It was ordered that each county society be assessed ten cents per member per year to defray expenses of the annual district meeting.

The following committees were appointed:

SCIENTIFIC WORK.—Dr. Charles Chittick, Frankfort; Dr. R. J. Ball, Lebanon; ex-officio, Dr. G. F. Keiper, Lafayette.

PUBLIC POLICY AND LEGISLATION.—Dr. Paul J. Barcus, Crawfordsville; Dr. S. M. Cotton, Goldsmith; Dr. L. S. Varner, Kokomo; ex-officio, Dr. Chittick, Frankfort; Dr. George F. Keiper, Lafayette.

It was ordered that the secretary have printed and distributed to each member the Constitution and By-Laws.

The following resolutions were adopted unanimously and recommended for adoption by the general meeting

in the afternoon, and to the county associations for adoption:

WHEREAS, Through the eupidity and avarice of drug manufacturers, many nostrums and so-called proprietary medicines have been put on the market and used by doctors in the treatment of sick people; and,

WHEREAS, The majority of the physicians of the United States, acting in their organized capacity through the American Medical Association, which is composed of the county and state medical societies of the country, have established a Council on Pharmacy and Chemistry, whose sole purpose is to examine new preparations not in the United States Pharmacopeia or National Formulary for their chemical and pharmaceutical purity; and,

WHEREAS, The said Council has examined many hundreds of such preparations and have found the large majority of them to be fraudulent or worthless, or both, and has published a list of those which it has approved; now, therefore, be it

Resolved, That the Ninth Councilor District Medical Society, and the medical profession in sympathy with it, in session assembled, hereby expresses its confidence in the Council on Pharmacy and Chemistry of the American Medical Association, and in order to make the work of force and effect among the physicians of this district and their sick and afflicted patrons; be it further

Resolved, That in so far as may be practicable, we and each of us will confine our prescription writing and the use of drugs to those preparations contained in the United States Pharmacopeia and National Formulary, which has been established as the law of the land by the National Pure Food and Drugs Act, and that we will not use, or permit to be used, any proprietary preparation until it has received the approval of the Council on Pharmacy and Chemistry of the American Medical Association; and, be it further

Resolved, That we condemn the acceptance of advertisements of fraudulent nostrums and proprietaries by the medical and religious press, and that we and each of us decline to receive any copy of any medical or drug journal, whether owned and controlled by a medical society, layman, druggist, or doctors, which advertises such preparations after Jan. 1, 1908.

We, the undersigned, and each of us, hereby pledge ourselves to abide by the above resolutions and to use no medical preparations which are not contained in the official United States Pharmacopeia or National Formulary, or in the list of New and Non-Official Remedies approved by the Council on Pharmacy and Chemistry of the American Medical Association, and that we will subscribe for no medical or religious journal, nor will we receive such journal from the postoffice which advertises fraudulent or worthless nostrums and proprietary medicines after Jan. 1, 1908.

That these resolutions be forwarded to the JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION and the *Journal of the American Medical Association* in order to show the profession of the country that the physicians of the Ninth Councilor District of the Indiana Medical Association propose to free themselves and their patients.

The above resolutions were submitted to the district association meeting in the afternoon and adopted. On motion the House of Delegates adjourned.

AFTERNOON SESSION.

The meeting was called to order at 2 p. m. by President Chittiek, with fifty-four members and a number of guests present.

The secretary reported the business transacted by the House of Delegates in the morning, and submitted

the resolutions, which were unanimously adopted. During the reading of the resolutions Dr. George H. Simmons, editor of the *Journal of the American Medical Association* and General Secretary of the American Medical Association, came in, and on request spoke in endorsement of the resolutions.

The first paper of the afternoon was by Professor Burrage, of Purdue University, who spoke on the "Opsonic Index." The paper was discussed by Drs. Beasley, Clark, Dinsmore and Moffet. Dr. Paul J. Barcus then read his paper on "Oxygen in General Anesthesia," and it was discussed by Drs. Newcomb, Williams, Kennedy, Rowland, Miller, Boonhill, McAlexander, Bolden and Moffet.

The third paper was by Dr. Geo. Rowland, on "Management of Acute Delirium Tremens." It was discussed by Drs. Beasley, Fitch and Hort.

On request, Dr. Simmons then addressed the meeting on the work of the American Medical Association. On motion, a vote of thanks was extended him.

The title of the next paper was "The Doctor and Superstition," by Dr. Femald. It was discussed by Dr. Ball.

Dr. Cotton presented the last paper, taking for his subject, "Laboratory Versus Bedside Diagnosis." It was discussed by Dr. Wynn and Professor Burrage. Dr. Barcus, in behalf of the Montgomery County Medical Association, invited the District Society to meet at Crawfordsville next October. The invitation was accepted unanimously. On motion the society adjourned to a banquet at the Methodist Episcopal Church.

GEORGE F. KEIPER, Sec.

ELEVENTH COUNCILOR DISTRICT.

The Eleventh Councilor District Medical Society was organized in Peru Jan. 31, 1908. The election of officers resulted as follows: President, Charles H. McCully, Logansport; secretary-treasurer, Maurice H. Krebs, Huntington; committee on by-laws, Charles H. McCully, Logansport, M. H. Krebs, Huntington, G. D. Miller, Logansport; committee on program, O. W. McQuown, Marion, W. R. Quick, Delphi, C. L. Wright, Huntington. Dr. Krebs offered the following resolution with reference to medical legislation:

WHEREAS, We are approaching the period when it will be necessary for the people of this district to elect representatives for legislative offices, both state and national; and,

WHEREAS, The medical profession as an organization and as individuals, is vitally interested in legislation in reference to medical organization, public health, hygiene and sanitation; be it

Resolved, That the Medical Society of the Eleventh Councilor District seek an expression of views from candidates for legislative office; and, be it further

Resolved, That we are unalterably opposed to any candidate whose views are opposed to medical organization and the advancement of public health and sanitation; and, be it further

Resolved, That this organization appoint a committee consisting of the councilor and a member from each county of the district which shall be empowered to seek such expression of views from candidates, and to advise the medical fraternity against all candidates whose views are opposed to medical organization.

After considerable discussion action upon the resolution was deferred until the next meeting.

MAURICE H. KREBS, Sec.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

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ORIGINAL ARTICLES

TREATMENT OF TUBERCULAR GLANDS AND GOITER WITH THE X-RAY, WITH REPORT OF CASES.

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INDIANAPOLIS.

The value of radiotherapy in superficial cancer and many skin diseases is well attested by many observers, but that the *x-ray* possesses decidedly curative action in certain diseased conditions below the skin is not so widely known. It was long ago shown that the chief effect of the ray is expended upon the skin; but that we can obtain effects upon the deeper structures, no competent observer will deny. Anyone who has watched the action of this agent upon the glandular and splenic enlargements of Hodgkin's disease or leukemia will be impressed by this latter statement.

However, failure has attended the use of the *x-ray* in several internal diseases that were, in the beginning of Roentgen therapy, thought to be curative by this new agent. To-day no reputable authorities make any claim to cure cancer below the skin with the *x-ray*, although in rare cases they have disappeared under its use; but as a palliative and to prevent a recurrence after operation, Roentgenization should be advised. In leukemia it has thus far brought only disappointment, notwithstanding the pronounced effects upon the spleen and blood. In Hodgkin's disease the results have been better, but as yet the mortality is very high. We must consider, however, that in the above diseases we are dealing with very grave disorders of unknown etiology that have thus far resisted every therapeutic measure.

When we turn to some other subdermal diseased conditions of a less malignant nature, we find that the success of Roentgen therapy is more pronounced. Only during the last few years has the *x-ray* been advised for tubercular glands and goiter, and lately many favorable reports from competent observers have attested the value of this new treatment and have brought it into wider recognition.

There will be many skeptics, however, who will deny or doubt the efficiency of the *x-ray* or any other non-surgical agent in what has always been considered a surgical disease, such as tubercular glands. Moreover, it can not be denied that therapeutically, for various reasons, the *x-ray* has fallen into a certain disrepute among many physicians. I shall not attempt to explain away these reasons, but will state the fact that no therapeutic agent has been so abused as the *x-ray*, and so long as this agent is employed by many physicians who are ignorant of its physics, its action and the proper technic of treatment, so long will we hear of severe burns, failure to achieve results, and many objections to its use. The *x-ray*, if intelligently used, does not admit of half the dangers of many of our drugs, and certainly not a small fraction of the dangers of anesthetics and the surgeon's knife.

In employing the Roentgen treatment in tubercular glands and simple goiter the proper technic is most important, for without it only indifferent results can be obtained. The technic of treatment should be altogether different from that used in surface conditions. Only a moderately high vacuum tube should be used, reading No. 4 on a Walter scale, or backing up three or four inches of spark. The tube should not be brought closer than six inches to the part, and the treatment given every second day for eight or ten minutes with one and one-half amperes of

current through the primary. The face should be well protected with lead foil. After six to ten treatments I am now using a piece of sole leather over the surface treated, which acts as a filter to absorb the low penetrating rays which affect the skin. When employing the filter I prolong the treatments to twelve or fifteen minutes. I change the tubes often, for the reason that in my experience better results are thus obtained, some tubes giving better therapeutic effects than others. When the first symptoms of dermatitis arise, stop the treatment. Usually twelve to twenty exposures may be given before mild inflammatory symptoms, such as redness, slight burning or itching, supervene. At times there is considerable tanning of the skin, especially when the leather filter is not used.

When the treatments are suspended it is best to allow a month's rest, and then if necessary repeat. The average case will require from twenty to forty treatments. The best results in most cases are obtained only after prolonged treatment, whose effects are carried to a point short of a marked dermatitis. The timid operator will fail in these cases; the over-bold will sometimes cause a painful burn, but this accident will occur very rarely if the proper technic is followed.

In exophthalmic goiter I employ a high vacuum tube (No. 6 Walter) placed fifteen or eighteen inches from the thyroid gland; the time of exposure, ten to twelve minutes, three times a week. I desire no effect upon the skin except a slight tanning. The treatments are thus continued until there is a relief of symptoms, and then I advise treatment once a week, gradually lengthened to once a month for a considerable time.

In tubercular glands the effect of the *x*-ray is a gradual diminution in size. Usually there remains some enlargement, which is fibrous tissue (the *x*-ray affects this but little) surrounding the diseased glands. This enlargement usually disappears after a year or two. If there is pus it must be evacuated before beginning the treatment.

In simple goiter the gland is reduced in varying degrees. In recent soft goiter there is usually complete reduction; in long-standing hard thyroid enlargement there is a reduction in size of one-third to one-half. Some observers report total failure in a small per cent. of these cases. In my own experience I have had no complete failures in cases of either tubercular glands or simple goiter. In exophthalmic goiter the treat-

ment is usually decidedly palliative, and in rare cases curative.

I now append some condensed case histories and results:

TUBERCULAR GLANDS.

CASE 1.—Mr. L., an Italian, aged 30, came to me three years ago with an enlarged gland the size of a walnut over the clavicle. There was no tubercular family history. The gland was removed surgically by Dr. F. M. Dorsey. Six months later there appeared in the upper cervical region a large mass of glands the size of a small fist. The Roentgen treatment was advised, and after twenty exposures the mass was reduced two-thirds. After a rest of several months the lower cervical glands on the same side began to enlarge. The patient decided to try a change of climate, and returned to his old home in Italy, where these lower glands were removed surgically. There have been no recurrences. The upper mass of glands treated by the *x*-ray has completely disappeared.

CASE 2.—Miss E., aged 16, came to me in the spring of 1906, on account of enlarged gland the size of a hickory nut in the middle cervical region, which had appeared six months previously. There was a family history of tuberculosis. Fifteen *x*-ray exposures were given, followed by one month's rest, when it was found that the gland was reduced one-half. It has remained quiet since, is becoming smaller, and is in all probability cured. An accompanying acne of the chin also disappeared under the influence of these Roentgen treatments.

CASE 3.—Miss M., aged 15, consulted me two years ago on account of enlarged cervical gland below the right ear. She had first noticed it one year previously. The enlargement was the size of a small egg. Twelve exposures were given, and after an interval of several months there was noticed a marked reduction in the size of the tumor. The patient has passed from under my observation, so I can not report the present condition.

CASE 4.—Miss F., aged 30, was referred to me in the spring of 1906 by Dr. Hayworth, of Noblesville. There was no tubercular family history. Five years previously the right cervical glands began to enlarge, and after two and one-half years had attained such size that an operation was deemed necessary. After a time the other side of the neck became involved, and the whole chain of glands enlarged very rapidly. In January, 1906, they were removed surgically, but the upper portion of the wound failed to heal and the nearby glands became involved. When I first saw the case in July there was a large mass below the left ear and a small enlargement the size of a walnut under the chin; both were rapidly enlarging. Twenty-nine treatments were given over a period of ten weeks. Considerable dermatitis

was excited through the prolonged treatment, in order to control this unusually severe case. After a rest of a month, treatments twice a week were given until fifteen were administered. At the end of this time the enlargements had almost disappeared, and at present, four months after the last treatment, the case has all the appearance of being cured.

CASE 5.—Mr. G., aged 25, consulted me in May, 1906, on account of a large tumor in the right cervical gland. It had been present for six months and was growing rapidly. A questionable diagnosis of tubercular glands was made, although certain characteristics of sarcoma were present. After twelve treatments there was noticed a considerable reduction in size and the tumor became less hard. The patient then disappeared and the history remains incomplete.

CASE 6.—Miss W., aged 16, was referred to me last June by Dr. Bates, of Broad Ripple. The family history was tuberculous. Under the right ear there appeared a large mass of glands the size of a baby's fist. The tumor was rather soft and palpitant, but showed no distinct evidence of pus. Lower down in the cervical region there was another enlarged gland the size of a marble, which was very hard. This patient has taken about twenty-five treatments, with a marked reduction of the size of the glands. At present she is continuing treatment.

CASE 7.—Miss M., aged 19, was referred to me last year by Dr. J. F. Robertson, of this city. There is a tuberculous family history. The upper cervical glands were markedly enlarged. Fourteen treatments reduced the glands more than one-half in size. The patient passed from my observation, so I can not state the present condition.

SIMPLE GOITER.

Only three cases of simple goiter have been treated in the last year by the *x*-ray. Before this time I have used the static wave current, which gives very fair results in most cases, but is slower in action and not so satisfactory as the Roentgen ray.

CASE 1.—Miss P., aged 22, consulted me in fall of 1906 for simple goiter of several years standing. The voice was affected, and at times the patient could not speak above a whisper. She had been treated with drugs without any improvement. Roentgen treatment was advised, and fifteen exposures were given, followed by a month's rest. At the end of this time the voice was completely restored and there had been a reduction in the thyroid to one-half its former size. During the eight months which have intervened there has been noted a further reduction in the size of the gland.

CASE 2.—Miss D., aged 20. This case was very similar to the one just described. There was almost complete disappearance of the thyroid enlargement after a dozen treatments.

CASE 3.—Mr. M., aged 40. He came to me ten months ago with a very large, hard goiter of ten years' duration. He complained of mild pressure symptoms. He wore a No. 17 collar. Thirty-five irradiations were given over a period of three months. At the end of this time there was a reduction of about one-fourth. A No. 16 collar could be worn comfortably, and the patient was so satisfied that no further treatment was undertaken. At present there are no pressure symptoms, and the thyroid seems somewhat smaller than at the close of the treatments.

EXOPHTHALMIC GOITER.

CASE 1.—Mr. L., aged 22, referred to me last spring by Dr. J. A. McDonald of this city. The disease was first noticed two years previously. On examination there could be noted a slight enlargement of the thyroid and a moderate exophthalmos. The pulse was 120, great palpitation, some dyspnea, and fugitive sweatings were complained of. This patient was given two or three treatments a week for several months, with considerable amelioration of his symptoms. The pulse is usually between 80 and 90 now, palpitation is only occasionally felt, and there has been improvement in a general way. Since July only occasional treatments have been given.

CONCLUSIONS.

1. Tubercular glands are very amenable to Roentgen treatment. When the glands are broken down, pus should be evacuated, followed by the ray.

2. Simple goiters in a large percentage of cases are successfully treated with the Roentgen ray. Even in long-standing cases, with considerable hardening of the glandular structures, there may be effected a considerable reduction. A small percentage of these cases fail to respond at all to the Roentgen treatment.

3. Some cases of exophthalmic goiter are symptomatically improved by the ray, and there have been a few cures reported.

4. The technic of the Roentgen treatment in these diseases is exceedingly important. No curative results can be expected unless the proper skill is employed in the application of the ray.

5. No unfavorable effects have ever been reported. There may be a possibility of a painful dermatitis, which, however, should be exceedingly rare if the proper technic is used.

DISEASED CONDITIONS CAUSED BY MOUTH BREATHING, AND THEIR PREVENTION.*

GEORGE W. SPOHN, M.D.

ELKHART, IND.

The function of breathing includes both inspiration and expiration. The object of respiration is to supply oxygen to the blood and to throw off carbon dioxide and other waste products to the expired air. The interchange of gases in the air vesicles is carried on by osmosis.

The nose is usually spoken of as the organ of smell, but its chief function is to prepare the air for respiration. As generally understood, air should be warmed, filtered and moistened before inhalation. The nose has a special construction for this purpose. The three large turbinated bodies in each nostril are well supplied with blood vessels. They warm the air as it passes to the pharynx and furnish a large surface upon which dust or any particles of foreign matter can lodge.

Every twenty-four hours there is thrown off from the nasal mucosa from sixteen to twenty ounces of serum. This supplies the air with its proper humidity as it passes to the pharynx and lungs.

The respiratory organs, from the nose to the air vesicles, are lined with mucous membrane the histology of which differs in different organs. The mucosa of the air vesicles contains but few glands and only one layer of epithelium. It is stated by some writers that when there is not sufficient moisture in the cells the epithelium piles up so that osmosis can not be carried on properly. Because the vesicles have but little if any moisture of their own secretion the air should contain the proper humidity as it enters the air vesicles, or otherwise there would be a lack of oxygen in the blood and the carbon dioxide would not pass off properly. There is not the same smooth and velvety touch to the pulmonary as there is to the oral and nasal mucosa. Fortunately there is a hardness and firmness to the former which is a protection against disease. A mucous membrane lacks the horny layer of the skin, and unless its surface is moist it can not do its physiological functions.

A dry mucous membrane in any part of the system will soon become diseased. This is illustrated in the conjunctiva in advanced Graves' disease, where the eyelids can not cover the eyeball. Hence any portion of the respiratory

mucosa which lacks in moisture must fail in its normal functions. Air taken through the nose to the pharynx and lungs carries with it the proper moisture and distributes it over the whole mucous lining; but air taken by the mouth not only lacks in proper moisture and warmth, but it causes a dryness and irritation of the mouth, pharynx and all the lower respiratory tract. It becomes a substitute unfitted for normal respiration.

The serum is naturally aseptic as it passes through the nasal mucosa. Carried to the lungs with the inspired air it bathes the whole respiratory lining; but when allowed to remain in the nose, as in the case of mouth breathers, it becomes a rich field for bacteria. This condition generally results in chronic catarrh. The natural direction of the air column as it passes through the nose is upward, backward and downward. It tends to keep the nose open and free, and in many cases corrects slight inflammations. It also acts as a prophylactic to catarrhal troubles by clearing the mucosa of all excreta. But imperfect nasal ventilation and respiration will soon lead to catarrhal troubles and nasal obstructions.

In nasal breathing the respirations are very much deeper than in mouth breathing. The former is like drawing air through a long tube, and thus all the muscles of the thorax are put at work. In fact, nasal respiration will compel one to take long, deep inhalations, thus developing the whole thorax, while oral breathing, with its shallow respirations, develops a short and narrow chest, or the so-called "pigeon breast."

The human being is the only animal that breathes through the mouth. The painter throws the spirited horse upon the canvas with the nostrils distended, but not with the mouth open. When the veterinary surgeon has a horse that breathes through the mouth he expects it to die very soon.

It is a law with some tribes of Indians that mothers must compel their children to breathe through the nose. The mouth of the infant is tied shut and, Spartan-like, the little one must breathe through the nose or die. Even the uncivilized recognized the needs of growing strong warriors and strong wives. The Indian learns his lessons from Nature.

There is a principle in physics that moisture is essential to carry on osmosis. Mouth breathing causes such a dryness in the air vesicles that the cells fail to do their normal work. When the air fails to give up its oxygen and take on the carbon dioxide the blood becomes impoverished and this leads to anemia and other diseases. Good

* Read before the St. Joseph County Medical Society, Jan. 28, 1908.

blood can not be obtained without sufficient oxygen. The habitual mouth breather is generally lacking in vigor, showing a lack of red corpuscles and hemoglobin. Anemic cases are frequently sent to the country by the attending physician for fresh air, but all patients can not enjoy this privilege. In many cases there is such complete muscular relaxation during sleep that the mouth opens. Many cases that are not suspected by the family are mouth breathers. They are often treated with iron and divers tonics with no success. But after giving them good free nasal respiration and compelling them to breathe through the nose it is surprising to note what results are obtained even with the same tonics that previously failed.

Hoarseness is often caused by oral breathing. It is a common occurrence with mouth breathers to retire in the evening feeling well and arise in the morning with a husky voice. The cold air produces a dry and congested state of the vocal cords. Nor is this condition produced only during sleep; a drive or walk in the open air, especially if it is cold, will often cause hoarseness. To breathe through the nose at all times prevents this. No one should walk so rapidly or exert himself to such an extent that the supply of air through the nose is not adequate.

We are a people of mouth breathers. The habit is growing, even with all the work that has been accomplished by the medical profession. One can stand on a busy street corner and observe how many of those passing are mouth breathers. Out of every one hundred of those who do not smoke nor chew thirty-five practice mouth breathing. If this condition is allowed to continue it will weaken us as a nation, both physically and intellectually. No one can think as well with the mouth open as when it is closed. The physical and intellectual giants obtain their air by way of the nasal route. To correct this oral breathing requires more than the work of the laryngologist. It requires the support of the family physician.

Croup is a laryngitis that is usually caused by mouth breathing. If there is ample breathing space through the nose and the patient has the mouth closed there can be no croup. In croup the lumen of the larynx is decreased, or there is a spasm of the glottis, both of which are caused by the effect of the cold dry air on the larynx. The ordinary treatments will verify these statements. The inhalation of medicated steam gives relief because the warmth and moisture overcome the laryngeal hyperemia. The emetic treatment gives relief by compelling Nature to throw

out at the offending point moisture which causes relaxation.

Spasm of the glottis from any cause is more easily overcome by exclusive nasal respiration. To illustrate: if water or any foreign body drops into the larynx or trachea, oral breathing will irritate the condition, but slow, deep nasal inhalations will soothe the irritated spot and supply the proper mental stimulus. The oft-repeated sore throat may sometimes be due to constipation with attending autointoxication or exposures, but careful observation will prove to the patient that oral breathing is generally the cause. It is a common occurrence for some persons to retire in the evening feeling well and arise in the morning with a sore throat, all caused by mouth breathing.

There are three classes of cases that breathe through the mouth, viz.: those that have nasal obstructions and can not breathe through the nose, those that have ample nasal space but lack in mental stimulus to the masseter muscles, and those that are imbecilic. The first class needs operative work for relief. The second class breathe through the mouth only when extremely tired or relaxed. They rarely acknowledge that they ever breathe through the mouth even during sleep, but the condition of the pharynx and not the opinion of the patient should be the guide for the physician. This class of cases should wear an anti-mouth breathing appliance during sleep. Even the physician, retiring late at night, tired and worn out, had better have his mouth tied shut during sleep than arise in the morning with a sore throat, husky voice and a dull headache. The third class of mouth breathers are subjects for an asylum.

The headache coming on during the latter part of the night or on arising in the morning may be uremic, but it is not an uncommon thing to find the case one of lack of nasal respiration. Any one doubting this can easily verify the statement by securing proper nasal breathing. In uremic headache the pain will not cease by changing position in bed, but a nasal headache will cease by closing the mouth and spraying the nares. Excellent results can be had with this latter class of cases by giving them the free and open nose. Then to overcome the old habit of mouth breathing, let them wear the anti-mouth breathing device every night for three or four months.

In febrile diseases, as typhoid fever, pneumonia, etc., patients will often breathe through the mouth for weeks. The dry parched mouth, cracked lips and sordid teeth should be a condition of the past. There is generally no need of

this because fevers do not cause congestion of the Schneiderian membrane. The dryness of the nares will give the patient a "stuffy sensation," but this can be easily controlled with mild oily sprays. In fact nothing will be necessary in many cases of fever. If all the respiration is wholly nasal the nose will not become so disagreeably dry nor will the patient's fever be as high as it would under mouth breathing. Proper nasal respiration will not only give the patient more comfort and rest, but it will increase the oxygen in the blood and thus lower the temperature and respiration. Patients can be taught to keep the mouth closed. The suggestion will be a mental stimulus which acts well on the masseters.

Some writers claim, and with good reason, that the bacillus of rheumatism and tubercular bacillus enter the system by way of the tonsils. The tonsil is a gland and is supposed to have the same function as any lymphatic gland. The normal tonsil stands as a citadel and prevents the entrance of bacteria and toxins into the general system, but the diseased tonsil forms a culture field for bacteria and opens the way for entrance into the system. The child is born with tonsils, but not diseased tonsils, and why should the tonsillar gland become inflamed more frequently than other lymphatic glands? The natural lubricant of the mucosa is its own secretion. Remove this moisture and there will soon be a denuded epithelium, which opens the way for bacteria to be taken into the system, and results in a sore throat. This is just what happens during mouth breathing. The cold air evaporates the mucus of the pharynx and the repeated attacks of sore throat leave chronically diseased tonsils.

It is a common occurrence to have a simple rhinitis terminate in a bronchitis. The patient speaks of his "cold having gone to the lungs." The physician speaks of it as having "extended by continuity of tissue." The fact is the rhinitis caused a nasal stenosis, the compulsory mouth breathing caused a pharyngitis and bronchitis which sometimes leads to tuberculosis. The writer does not wish to convey the idea that oral breathing is the direct cause of tuberculosis or any other disease. It does its part in causing or, at least, influencing pathological conditions.

Oral breathing causes relaxation and thickening of the lips. In some cases the upper lip becomes so thickened and shortened that it will not cover the incisors. Such an unfortunate condition can be avoided if the children from infancy

are taught to breathe wholly through the nose. An open mouth cultivates looseness, relaxation and indifference, as is indicated in many of the African race. A closed mouth cultivates firmness, decision, strength of character and positiveness, as is shown in some of the tribes of the American Indian. The brain is the seat of all important nerve impulses. If the mouth is open the fault generally lies in the brain. The nasal obstructions and the physical deformities that are met in the exceptional cases were acquired either from habit or inheritance, and even inheritance was due to habits of the ancestors. To overcome a habit it is sometimes necessary to do as Holmes suggested—to begin the correction two or three generations before the child is born.

If the child is taught and compelled to breathe through the nose, and given to understand that oral breathing is absolutely wrong, the nasal route will become a fixed habit. Parents do not understand the necessity of this. They do not understand that good blood is absolutely essential to good manhood and good womanhood, and that this desideratum can not be secured without the requisite amount of oxygen in the blood.

CONCLUSIONS.

1. All respiration should be nasal.
2. At birth the child's respiration is nasal and not oral.
3. The human being is the only animal that becomes a mouth breather.
4. Nasal breathing will prevent diseases of the respiratory mucosa.
5. Oral breathing will cause diseases of the mucous membranes.
6. Oral breathing becomes a habit or a necessity.
7. If a habit, the fault lies in the brain.
8. In adults the proper mental impulses will correct the habit.
9. In children the habit can be stopped with suggestions or by wearing an anti-mouth breathing device.
10. If oral breathing is a necessity the nose and throat should be freed of all obstructions. Diseased tonsillar tissue in the postnasal space or in the pharynx should be removed. Neoplasms, hypertrophies, exostoses, deviations or anything which interferes with nasal breathing should be removed.
11. Every case of mouth breathing can be improved and most cases can be cured.

PROPHYLAXIS, THE ESSENTIAL FUNCTION OF THE TONSIL.*

BENJAMIN H. ORNDOFF, M.D.
CHICAGO.

I believe that prophylaxis is a function of the tonsil. This belief is based on observations and studies. That the functions most important to the organism are manifest as soon as the being is ushered into the world is apparent by the fully developed, highly functionizable tonsil at birth. Immunity against the hoards of bacteria that infest the human organism as soon as it becomes a separate individual is one of the earliest and most essential functions to be established in order that the organism can maintain an independent existence. I propose in this paper to show that the tonsil, for a time at least after birth, is coupled essentially with the function of establishing this immunity.

PHYSIOLOGICAL DESCRIPTION.

To one attempting a somewhat careful investigation of the literature¹ concerning the tonsil, it is remarkable how little has been written on their functions. By this I mean functions that are real physiological processes, not hypotheses of mystical foundation.

The tonsil is an organ that has attracted the attention of some of the most able men of our land. It has been the nidus for research and investigation along lines of anatomy, their clinical significance, and the technic of their removal. But with all regard for these men and their well-spent energies, they have not solved the problem which gives the tonsil a right for its real existence.² In the present status, then, we may say that the tonsil is an organ having no real important physiological value, that it would probably be a prophylactic step to remove the tonsils of healthy individuals.

Spicer³ gave the tonsil the function of elimination of certain elements from the system. He is most heartily supported by Brown⁴ and others. Fox⁵ allots to the tonsil the power to absorb the products of salivary digestion, and he is supported in his views by such men as Hill.⁶ A barrier to bacterial invasion—per orum—is the

function given them by Gulland.⁷ He seems to have based his theory on Stohr's phenomena, which is merely the enormous emigration of leucocytes from the tonsil into the buccal cavity, and the great work on comparative pathology by Metchnikeff.⁸ Wood² has claimed for the tonsil a primogenial source of leucocytes. If this be true, as he concludes, then we have been wrong regarding the embryological origin of the white corpuscles of the blood. The function of furnishing an internal secretion comparable to that of the adrenal gland has been advanced by Masini.¹⁰ Whatever importance may attach to these functions, as well as many others, I will not take space to consider, and to what extent the tonsil carries them. We do know that at the time of life when they are ordinarily removed, the human economy knows no loss. So, then, it would not seem unreasonable to conclude that the function which explains the reason for the real existence of the tonsil has ceased to exist before tonsils are removed ordinarily.

EMBRYOLOGICAL DESCRIPTION.

The first evidence of the appearance of the tonsil occurs about the fifth month of fetal life.⁹ It develops in the sinus tonsillaris, which is the distal portion of the second visceral cleft or groove, after its separation by the growth of the palatal process. It is in the latero-distal portion of the sinus tonsillaris that the lymphoid accumulations, vessel aggregations and epithelial down-growth appear, and this down-growth continues until the sinus tonsillaris is all but filled, the very proximal portion remaining as the recessus supratonsillaris. This development explains very satisfactorily the direction the trypts assume, the points on the surface from which the vessels enter, the absence of afferent lymph vessels, and, finally, the time at which development is begun shows that the function calling for them is one imposed on the organism after development had reached quite a high degree of complexity.

When we consider that the organism was far along the path of development before there arose that rivalry in the struggle for existence which ultimately meant symbiosis and parasitism, and that here began the function which called for a structure to support it, and finally that the tonsil begins to make its appearance about this time, i. e., late in the process of development and is mature by birth; considering these facts we can

* Read before the Porter County Medical Society, Dec. 3, 1907, and referred by the society for publication in THE JOURNAL.

1. The John Crerar Library, Wabash Avenue and Washington Street, Marshall Field Building, Chicago.

2. Wood, George Bacon: The Functions of the Tonsils, Univ. of Penna. Med. Bull., October, 1904, p. 246.

3. Splacer, Brown: *Lancet*, li, p. 805, 1888.

4. Brown, R. C.: Med. Rec., March 1, 1902, p. 324.

5. Fox, R. Hinsington: Jour. of Anat and Phys., 1885-1886., xx, p. 559.

6. Hill, William: *British Med. Jour.*, Sept. 15, 1888.

7. Gulland, G. I.: Edinburgh Med. Jour., July, 1891.

8. Metchnikneff: Comparative Pathology of Inflammations, Edition of 1883.

9. Robertson, Charles M.: Jour. Am. Med. Assn., Nov. 24, 1906, xlvii, pp. 1725-1731, Certain Facts Concerning Fauical Tonsils.

10. Massini, G.: N. Y. Med. Jour., Sept. 23, 1898.

not but see the happy associations of this most essential problem which the organism was compelled to meet, and the evolution and resulting functions of the tonsils.

Immediately after birth the individual is infested with many different species of bacteria (Miller¹⁹ has recognized more than thirty species in the mouth of healthy individuals), to which an immunity must be established; to many of these species the immunity once established is permanent and we know them then as non-pathogenic bacteria. From this the period of established immunity lessens in time until they are placed in another class, the pathogenic bacteria. However, were it not for a process by which immunity can be established in the system before bacteria entering the body have time to there multiply and produce their poisons and in turn be absorbed, the individual would probably succumb in most instances; or, in other words, if the individual was compelled to await the multiplication of bacteria within the tractus intestinalis, and the subsequent toxemia and final immunization, the latter would certainly be seldom established. So the tonsil provides nicely for this difficulty by producing immunity not associated with a toxemia and the actual time required is so very short that by the time the system is to labor under the toxemia it is far along in the process of immunization.

ANATOMICAL DESCRIPTION.

The tonsil may be described as consisting of four structural elements,¹¹ the connective tissue capsule with its trabeculae, the loose, finely reticulated connective tissue meshes filled with lymph cells, the germinating lymph cells composing the tonsillar follicles, and the crypts with their stratified epithelium.

The peritonsillar glands¹² are mucous glands situated in the immediate vicinity of the tonsil and whose ducts empty into the crypts at their depths. It is these glands which keep the crypts filled with a material that serves as a most excellent culture media for the different species which, on landing within the nasal or buccal cavity, are collected almost immediately into the crypts,¹³ and there so managed that the proper substances are distributed throughout the system and there incite the elaboration of protective substances. In other words, we may say that the crypts serve as the culture tubes for the body, in which the

vaccine of that particular species of bacteria is manufactured, or, as Good¹³ so appropriately expresses it, "The battlefield in which the first fight occurs between bacteria and the leucocytes." The position of the tonsil has contributed greatly to the successful execution of this function. Were it not for a very important function being enhanced by the position of the tonsil, it would seem to be a serious mistake in nature to place this most susceptible structure where it is to be the subject of severe traumatism from so many sources.

The tonsil is so located within the grasp of the muscles, i. e., the muscles composing the pillars and the superior constrictor¹⁴ that it is mechanically thrust against each bolus of food as it passes by en route to the stomach during deglutition. Its location affords another important factor. The cilia of the nares and accessory nasal sinuses¹⁵ keep a constant flow of the lymph in which they exert their power toward the fossa supratonsillaris where it finally accumulates.¹⁶ It is marvelous, to say the least, when we consider critically the phenomena which exist in the tonsil, viz.:

(a) Emigration of phagocytic leukocytes¹⁷ into the buccal cavity giving rise to the so-called salivary corpuscles,¹⁸ Stöhr's phenomena.

(b) Passing beneath the cryptal epithelium on non-living matter.

(c) The current of lymph that constantly collects within the crypts from the tonsillar surface and sinks beneath the epithelium.

(d) The scrutiny with which the living matter (bacterial) is selected from this lymph current and retained within the crypts.

With these established observations in mind we can readily see how a perfect equilibrium can be maintained whereby a certain species of bacteria remains just long enough within the crypts to elaborate sufficient vaccine which, when transported by this lymph current throughout the system, to establish immunity and subsequently return enough bacteriotrophic substances, e. g., opsonins and phagocytes,²⁰ to annihilate that species of bacteria from the tonsil, and establish immunity in the system. Stöhr's phenomena serves to avoid the harmful collection of non-living ma-

13. Good, Robert H.: Treatise on the Tonsil, Chicago College Medicine and Surgery.

14. Nothnagel: System of Medicine, Volume on Tuberculosis, p. 123.

16. Trans. of the Congress of Am. Phys. and Surg., v. p. 12, 1900.

17. Goodale, J. L.: Boston Med. and Surg. Jour., civ, pp. 278-286, Systemic Infection Through the Tonsils.

18. Brown, Robert Curtice: Med. Rec., lxxi, p. 341, Nov. 9, 1907.

20. Hollister, J. C.: Surgery, Gyn. & Obstet., December, 1906, Bier's Hyperemic Treatment and Vaccine Therapy.

19. Miller: Quoted by Metchnikoff.

11. Poirier, P., Cuneo, B., and Delmare, G.: The Lymphatics, translated into English by Cecil H. Leaf, 1904.

12. Piersol, George A.: Text-Book of Normal Histology, Seventh Edition, 1903, p. 158.

15. Wright, Jonathan: N. Y. Med. Jour., Feb. 16, 1907, Jan. 6, 1906, Jan. 20, 1906.

terial within the tonsil. The phagocytes select these particles of dust from the flowing lymph and transport them into the oral cavity.

SUMMARY.

1. Location of the tonsil explained. The most suitable point for the certain collection of a specimen of every species of bacteria entering and lodging within the oro-nasal cavities.

2. Stöhr's phenomena explained. The removal of dust from the tonsil, and destruction to some extent of the bacteria within the crypts.

3. Miraculous selective ability of the cryptal epithelium better understood. The bacteria of the lymph current constantly sinking beneath surface, carrying non-living matter, have an affinity for the contents of the crypts, i. e., the secretion furnished by the peritonsillar glands.

4. Removal of the tonsils in the adult being a prophylactic step, rather than a detriment, the essential function has been principally or wholly completed.

5. Why so little distress is brought to bear on the organisms, when it is subjected almost synchronously to invasion by such great numbers of bacteria. Immunity is established through the action of the tonsils, devoid of the usual toxemia associated with infection and its subsequent immunization.

6. The function which explains the reason for the real existence of the tonsil.

These facts have been brought to my attention through an effort to obtain a pathological report on one hundred pairs of tonsils, removed by Dr. Good in his clinics at the dispensaries of the Chicago College of Medicine and Surgery.

Heyworth Building.

PRACTICAL NOTES FROM A GENERAL PRACTITIONER OF MEDICINE.

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It has been my observation, as a general practitioner of medicine, that numerous people and not a few physicians depend altogether too much upon drugs and medicines alone in the management and treatment of diseases. In such instances medicines alone are expected to accomplish everything needful. The multiplicity of new remedies, alleged to be curative for all the diseases of man, and the avalanche of advertisements fresh from the steam presses, crowded upon the masses, has much to do with this state of affairs. Patients will always take medicine when they will not take advice, and the physician

knows or should know that it is the advice they need and not the medicine. The physician whose force of character makes his advice sought after and followed is the one who accomplishes the most good.

Likewise it has been my observation that there has been and now is too much self-medication by the people. And in the instances where medication is right and properly needed the wrong medicines are self-administered. Instances are very numerous of late years of young unmarried men, who, when afflicted and not having been accustomed to consult a regular physician, consult with their intimate companions, resulting in the laying of the case before a druggist from whom voluminous advice and expensive supplies are secured, with the result of an aggravation of all the difficulties and requiring much time to correct.

Long years ago it was my observation that in the treatment and management of sick people each individual patient had self-powers, more or less, for recovery, which are known in modern medical language as the opsonins. Such condition is a very important factor as an aid in the patient's recovery. Not to disturb, not to diminish nor to in any way injure such power was constantly uppermost in my mind. Numerous times when a stomach needed to be emptied in great haste one or two pints of the warm normal salt solution promptly introduced into the stomach were vastly superior to any emetic usually found in medicine cases, thus saving the patient's self-powers and hastening recovery.

With the rapid and modern increase of our knowledge of infection, contagion and inoculation, these terms have a very much lessened value. We have learned now that there is no sharp line of distinction between infection, contagion and inoculation, for in a single disease any one of the three methods may be operative. As an instance, in a disease like scarlet fever it may be conveyed by milk and is, therefore, infection, by direct contact or contagion, and by the injection of some fluid, as that of saliva, or its falling upon an abraded surface, and is, therefore, inoculation. And, under our statute law, in the cases of infection and contagion the rules of quarantine should be observed, but not so literally under the third instance. I only mention this to show the impropriety of the indiscriminate use of the terms infection, contagion and inoculation.

The rapid progress of civilization and of human knowledge will soon bring the future physician to the point where his chief duty will be not to treat disease but to point out how it may be prevented. The prize fights and football

games, with their results, may continue in defiance of the humane societies; the profligate, the inebriate and the glutton may persist in spite of the reformer, and through all the numerous avenues of human activities the physician's warning will continue to go unheard, but from all this vexatious turmoil and confusion there will still be heard the physician's voice pleading prevention. Witness the cases of blood poison and lock-jaw after each of our notorious and glorious celebrations of July 4.

The first observation of a damaged or fissured nipple, soon after delivery, should put the medical attendant on his guard to prevent mammary abscess. These troublesome things have very seldom appeared of late years, and can always be prevented by timely and proper attention. Such abscesses are produced usually by septic infection through erosions, fissures or through the external orifices of the milk ducts and the accumulating engorgement of stagnant milk. By enjoining rest in bed, rest of the inflamed organ and not allowing the child to suckle from it, administering saline cathartics, abstaining from fluids, feeding oatmeal gruel, giving proper attention to the nipple, and, last but not least, by the application of numerous adhesive strips one and one-fourth inch wide, firmly binding and compressing the mammary gland to the extent of squeezing out the blood, like water from a sponge, thus continuously preventing the breast becoming engorged with blood, the condition may be controlled. For many years it has been my custom to apply these adhesive strips in such a manner as to produce immediate and permanent relief.

Chloroform should never be administered to a patient under any circumstances except by a physician of experience. It is always a dangerous remedy, and when given the effect should be watched with extreme care. The patient should receive it fasting. The room should be well aired, quiet, with but few attendants, and no excitement. The patient should be recumbent. The pulse, the respiration and, in fact, the patient as a whole should be carefully and continuously watched. No rule can be given as to how much chloroform should be administered. Nationality of patients is an important factor. An Irish man or woman will require five times as much chloroform as a German, a Portuguese, a Swede or a full-blooded negro.

In gunshot wounds the wound of exit is always very much larger than the wound of entrance, and it is always important to secure copious drainage in the direction the missile has passed. This is important to prevent infection of adja-

cent tissues. For the first forty-eight hours the more frequently the wound is properly dressed the better the results that will obtain. This statement will meet with objections from numerous practitioners, but with an experience of nearly forty years' practice, with such numbers as usually fall to the lot of a general practitioner, I have no reason to abandon the method.

The rapid application of cold and freezing mixtures to produce insensibility for the purpose of performing an operation should be condemned. The reason for this is that after the tissues have been frozen the cells fail to regain their former functions when the normal temperature is restored, and the blood does not enter the involved area, and hence a local death.

In the treatment of acute rheumatism the administration of medicines is usually of less importance than the correction of the habits and customs of the patient. Advising the patient what he should not do would fill a large volume, but the proper things he should do are simple, few, plain and easily understood. A comfortable bed, a room temperature of about 70 to 75 degrees F., a full hot bath, sufficient purge, every affected joint wrapped well with best commercial cotton, an abundance of cold water and lemonade without sugar, any kind of light broth and crackers, bread and milk and no other diet, a Dover powder as required in a capsule to secure rest, and that is about all. For a continuous medicine a teaspoonful of colored sweetened water every two hours will come as near meeting all the requirements as any or all the multiplicity of medicines recommended for rheumatism. It must be remembered that the true nature of what is alleged to be acute rheumatism is not known. There is no speedy method to carry these cases of acute rheumatism on to an ultimate successful recovery. Time is an important factor. Too much medication and frequent doses are very annoying and burdensome to the patient, denying him the opportunity to recover.

In the management of convulsions of babies it has been my observation that it is much easier to treat the patient than to manage the excited parents, friends and a room full of attendants. There is really no cause for alarm in infantile convulsions. Proper attention will give good results. Too much domestic interference is far more injurious than otherwise. It is natural for some babies to have convulsions. I have told mothers that they may look for convulsions in their babies and not to be alarmed. There is a taint in the general makeup of the babe and an inherited predisposition transmitted. When the proper environments are met an explosion of con-

vulsions ensue. To the layman the scene appears frightful, but to the medical attendant it is a physical objective symptom, full of numerous valuable suggestions for its proper successful treatment.

The early medical writers urgently recommended that for the treatment of uterine hemorrhage it was always important to elevate the foot of the bed from twenty to thirty inches. That same suggestion is equally as useful in the management of acute diarrhea or acute dysentery. Many years ago it was my custom to take advantage of such position, especially in the treatment of young children and babies. A few years ago an Irish girl, aged 20 years, came under my charge from another physician. Her previous health was good in every respect. She was attacked with acute dysentery. I was called in the night, and so violent was the case that the sister of the patient informed me that during the previous fifteen hours the patient had been assisted upon the commode 150 times. She was being rapidly reduced and in much distress. Immediately the foot of the bed was raised thirty-six inches. This was objected to strenuously for a few hours, but the objection was disregarded, and in the succeeding twenty-four hours the patient was assisted upon the commode but three times. Little or no medication was required. After a proper time the bed was gradually lowered and the patient went on to a successful recovery.

There is no question in my mind that the frequent operations for the removal of the appendix for the treatment of appendicitis are very often uncalled for and should be condemned. I have personal knowledge that an appendicitis operation had been urgently recommended and met by a refusal on the part of the patient and friends, and the patient went on to a good recovery. The operation for appendicitis is not a dangerous one, but there is too much of a widespread tendency for early operations, and the patient's recovery is attributed to the removal of the appendix, whereas the patient might have recovered without an operation.

WHAT THEY SAY ABOUT US

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION is the latest addition to the list of state publications. It is a credit to the organization, and the editor, Dr. A. E. Bulson, Jr., of Fort Wayne, is to be congratulated upon the splendid appearance and table of contents of the first issue.—*The Journal of the Michigan State Medical Society.*

THE latest recruit in the ranks of medical journals published by and for the medical profession is THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, the first number being that for January, 1908. To say that it is a fine tribute to the Association which it represents is merely to give no more than due credit to the able editor, Dr. Albert E. Bulson, Jr., Fort Wayne, who for many years edited the *Fort Wayne Medical Journal-Magazine* with credit to himself and his publication. But Dr. Bulson, with rather unusual broadmindedness, has recognized that the proprietary journal can not serve the best interests of the medical profession so well as the publication of and for the organization representing the whole of the profession, and he has, therefore, discontinued the *Fort Wayne Medical Journal-Magazine*, or, rather, merged it with THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. That this newest of state journals will be welcomed by the physicians of Indiana, we have no doubt; that it will greatly aid in perfecting and maintaining the organization of the medical profession in that state is a foregone conclusion; that it will keep the place in the first rank of medical journals to which it is entitled by this initial number, may be safely believed. And not the least pleasant thing to note in regard to the newly-born journal is the statement that it will advertise no preparations other than those of the Pharmacopeia, the National Formulary, or such as have been approved by the Council on Pharmacy and Chemistry of the American Medical Association. Some state journals—notably New York—still maintain that they will not accept the ruling of the Council alone, but will be guided by individual judgment. "Individual judgment" is not worth a rap when one is dealing with a bunch of liars, and of all liars the nostrum man is king. He can tell more lies, of more kinds, in more ways, with more semblance of truth, in a more sanguine and apparently truthful way, with greater persistency, more deliberately and with greater profit—to himself—than any cuss that has yet been discovered. It takes time, patience and much money to disclose these lies, and all these things are being spent by the Council—but not by any state medical organization or its publication. As a natural result, we find that the profession in the great state of New York is having foisted upon it, through the pages in its own journal, some nostrums for the presence of which the physicians of Indiana will not have to blush with shame.—*California State Journal of Medicine.*

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EDITORIALS

**A PLEA FOR THE ASSISTANCE OF THE
COUNTY SOCIETY SECRETARY.**

Before the publication of the initial number of *THE JOURNAL* we wrote to every county society secretary whose address we could obtain and made a courteous request for cooperation in making *THE JOURNAL* successful as an organ of the whole profession of the state. We requested every secretary to furnish us his correct name and address, the frequency and time of meetings of his respective society, complete reports of every meeting, and as many news notes and personals concerning the profession in his locality as possible to secure. We fully explained that it was our intention and desire to make *THE JOURNAL* of particular interest to every physician in each county in the state, but that our efforts in this direction would not meet with the best success unless we could have the cordial and willing assistance of the county secretaries to whom we are rightfully entitled to appeal for cooperation.

We are pleased to acknowledge the fact that many of the secretaries promptly complied with our request, and are now our most valued assistants by continuing the work begun. Other secretaries have been repeatedly urged to give us their cooperation before we could stimulate them to action, while some secretaries have absolutely failed to make any response of any kind whatsoever. Our County Society Directory contains some blanks as a result of this apparent indifference or negligence.

Three questions have been asked every county society secretary, and in some instances the questions have been asked a number of times, the information being desired for our directory. The questions were: 1. Give your correct name and postoffice address. 2. How often does your society meet? 3. What day does your society meet? Some of the secretaries answered all of the questions promptly; some answered the questions incompletely and seemed provoked because we requested more complete information; some wrote in answer to repeated letters that they had answered the questions once and did not know why they should do so again, while a few entirely

ignored the repeated requests. One secretary wrote us a long letter to the effect that he had no time to furnish such information as we requested, and we reminded him that with the same expense of time and effort that he put on his letter to us he could have furnished us with the information desired and a report of several meetings of his county society.

Now, the truth of it is, we are asking for that which it should be a pleasure for any county secretary to furnish and for which we should not have to beg. No secretary is so busy that he can not give us the little we ask. And this reminds us that it is always the busiest men who have time to do things and are always accomplishing something which not only makes for themselves but for others as well. We each owe something to others as well as ourselves, and in the practice of medicine if we pursue a narrow, selfish course we will never make any advances.

THE JOURNAL has been started with a view to broadening and increasing the number of benefits which the Indiana State Medical Association affords its members. *THE JOURNAL* demands an enormous amount of work on the part of the editors, far more perhaps than the average reader imagines, and this work is carried on most of the time when rest from the duties of regular labor would seem indicated. But *THE JOURNAL* work is carried on cheerfully and uncomplainingly in the hope that it is of some real service and value to the medical profession of Indiana, and as such will be appreciated. To be of most service *THE JOURNAL* must be the organ of all the physicians, and as such we must report the proceedings of the various county societies and information of interest regarding the members of those societies. How essential it is, then, to have the assistance of the county secretaries in procuring this information, and in the interest of the profession how willing the secretaries ought to be to furnish the information. And how it lightens our burdens and how it helps us to make *THE JOURNAL* better.

We want to make this a personal appeal to the secretaries for the cooperation which we have solicited. We have our faults and they are many, and we may fail to properly indicate our appreciation of assistance, but our shortcomings in this direction, often due to exactions upon our time by the burdens which fall upon our shoulders, should not be considered as an evidence of lack of appreciation of assistance. On the other hand, even our failure to give proper credit should in no way influence any person in not giving what he can to the cause of the medical profession as a whole.

THE INSURANCE EXAMINATION FEE.

Following the report of the Committee on Insurance of the American Medical Association and the recommendation that the county and state societies take such action as is deemed wise and proper to secure for medical men five dollars as a minimum fee for medical examinations for life insurance, the medical men in several states, as a result of united effort, have succeeded in securing favorable action from a large number of insurance companies upon the request for a flat five-dollar rate. Of the three large New York companies which had reduced the fee to three dollars—the New York Life, the Mutual Life, and the Equitable Life—only the New York Life still continues the three-dollar fee, the others having restored the five-dollar rate.

Some of the best managed, and therefore the safest, companies have always paid the five-dollar rate in the warranted belief that a trustworthy medical examination for life insurance is worth five dollars, and that with the payment of such a fee it is possible to regularly secure men of ability and experience to act in the capacity of medical examiners. Some of the newer and smaller companies belong to this list, but there are many companies who, from false ideas of economy, continue to pay less than five dollars for their examinations.

Among those companies paying the five-dollar rate for life insurance examinations are the following:

American National Life, Galveston, Texas.
 Boston Mutual Life, Boston.
 Citizens' Life, Louisville, Ky.
 Commonwealth Life, Louisville, Ky.
 Capital Life, Denver, Colo.
 Colorado National Life, Denver, Colo.
 Connecticut Mutual Life, Hartford, Conn.
 Equitable Life of New York.
 Etna Life Ins. Co., Hartford, Conn.
 Fort Worth Life, Fort Worth, Texas.
 Guarantee Life, Houston, Texas.
 Manhattan Life, New York.
 Massachusetts Mutual, Springfield, Mass.
 Mutual Benefit Life, Newark, N. J.
 Mutual Life of New York.
 National Life, Montpelier, Vt.
 New England Mutual Life, Boston.
 Northwestern Mutual Life, Milwaukee.
 Pacific Mutual Life, Los Angeles.
 Pacific Mutual Life, San Francisco.
 Provident Life & Trust Co., Philadelphia.
 Penn Mutual Life, Philadelphia, Pa.
 Reliance Life, Pittsburg.
 Southwestern Life, Dallas, Texas.

State Mutual Life, Rome, Ga.

Southern States Life, Atlanta, Ga.

It will be observed that not one of the Indiana companies is included in the above list, and yet there is no logical reason why they should not pay the five-dollar rate. If the Indiana medical men will take such a stand as has been taken by the doctors of Texas, Kentucky and some other states, the Indiana companies will very soon see the necessity, if not the justice, of paying the five-dollar rate, which is a respectable as well as a just fee for the services required.

As long as the medical men of Indiana remain ununited and inactive in the consideration of this question, just that long will the insurance companies of Indiana continue to impose upon us. What has already been accomplished in securing a restoration of the five-dollar rate by such strong companies as the Equitable and Mutual of New York has come through the united action of medical men in other states. We have not contributed to the movement. But we should not wait for medical men of other states to accomplish for us all that can be accomplished in the way of securing proper recognition from the Indiana insurance companies, but let us at once put forth an effort to secure our just dues.

To bring about the desired results in this life insurance examination question, it is only necessary for the members of the various county societies in the state to individually and collectively refuse to make any complete life insurance examinations for less than five dollars and then religiously stick to the decision. United action on the part of even a majority of the county societies of the state would place all of the life insurance companies paying less than the five-dollar rate in a decidedly uncomfortable and dangerous position in Indiana. The cause is a just one and entitled to the consideration and action which we recommend.

THE GREAT WHITE PLAGUE.

In the light of our present knowledge of tuberculosis and the necessity for prompt recognition of the disease in order to accomplish results for the patient as well as protect those with whom the patient comes in contact, it would seem unnecessary to call the attention of the medical profession to the known means of promptly and certainly diagnosing this dread destroyer. But as a matter of fact there are medical men in every community who are constantly failing to recognize tuberculosis until it has reached that

advanced stage where the best results for the patient have been reduced to the minimum.

Cases of advanced pulmonary consumption are very frequently diagnosed by supposedly good physicians as "chronic stomach disease," "liver trouble," "chronic la grippe," "chronic bronchitis," etc., until the disease progresses to the point where even a layman can make the diagnosis and it is too late to accomplish such benefit for the patient as would have been possible had correct diagnosis and appropriate attention been adopted earlier in the history of the disease. Some physicians never make a diagnosis of pulmonary consumption until the afternoon fever, with flushed face, the steady loss of weight, the night sweats, and the prolonged cough with its attendant expectoration of purulent material, conclusively points to the nature of the disease. Other physicians wait until tubercle bacilli are found in the sputum before making a diagnosis of the disease, apparently forgetting that when tubercle bacilli are found in the sputum the disease is already well advanced.

We owe it to ourselves as well as our patients to make an early diagnosis, and the earlier we detect the disease the better the chances of securing good results from appropriate treatment.

There is now no excuse for neglect on the part of the physician to have the sputum of any patient examined bacteriologically. If he is not competent to do this work, the sputum should be sent to some one who can do it, and our State Board of Health now has a laboratory where such examinations are made and without expense. The existence of tubercle bacilli in the sputum is an infallible indication of the existence of tuberculosis. The presence of elastic fibers in the sputum denotes destruction of lung tissue, and in a large proportion of cases this also indicates the existence of tuberculosis.

But of particular importance is the method of diagnosing the disease before tubercle bacilli are detected in the sputum, and here we refer to the injections of Koch's tuberculin for diagnostic purposes and the more recently used ophthalmotuberculin reaction.

The method of employment of these tests is so fully given in late text-books and current medical literature that it is unnecessary to enter into description in detail. Suffice it to say that by the injection method the patient is given a dose of one milligram after a careful two days' record of temperature, taken every two hours, has been made. If no reaction occurs a larger dose of two or three milligrams is given. Reaction occurs from ten to fourteen hours later, the tem-

perature often reaching 103 or 104 degrees. The reaction is considered significant, but with the view of eliminating a possible coincident rise of temperature from other causes it is advisable to repeat the test two or three weeks later, when if a similar reaction is secured the diagnosis of tuberculosis may be considered fairly conclusive.

The ophthalmo-tuberculin reaction, which has come into prominence during the last few months, depends upon a local rather than a systemic reaction for its value as a diagnostic aid. A one-half or 1 per cent. aqueous solution of dried Koch's tuberculin is employed, and one or two drops of the solution, freshly prepared, are instilled in one of the patient's eyes. A local reaction, consisting of the development of a conjunctivitis with stringy secretion, occurring from three to twelve hours later, may be considered fairly positive as to the presence of tuberculous infection in the system of the patient.

While there may be some inaccuracies in the results secured from one or both of these tests, they are so generally recognized as being distinctly of value as diagnostic aids in a very large proportion of cases that it is unwise for us to ignore their value, and we should employ them in those suspected cases in which positive diagnosis can not be arrived at by any other means. In no other way is it possible for us to do justice to our patients or to ourselves.

INVESTMENTS FOR THE MEDICAL MAN.

"Get rich quick" schemes seem to have a peculiar fascination for the average medical man, if we can believe the stories of our friends who have sustained losses and the reports from promoters who in confidence confess that the most readily secured patron is the doctor. And the worst part of it is, the greater the swindle the more likely the doctor is to invest, providing a smooth-talking promoter gets hold of him. Worthless mines, stocks, bonds, oil wells, patents and numerous other things have been the means of inducing the doctor to part with his hard-earned money. The doctor has also been a ready patron of numerous companies, without tangible assets, organized purely with a view to produce profit for the promoters and in which the innocent doctor has invested on the supposition that he was being let in "on the ground floor." These fraudulent companies are usually not satisfied with the returns from the sale of their worthless stock, but manage to secure, on one pretext or another, numerous assessments or

advances which still further bleeds the stockholding victims. If, perchance, the doctor happens to get into a company that really develops into a profitable concern, the chances are ten to one that the large stockholders or promoters will succeed in some way in securing his interest without affording him an opportunity of securing profit, and perhaps not even permitting him to get off without loss.

If the doctor desires to invest his surplus income in a way that promises to make the investment safe as well as profitable, he can do no better than buy productive real estate in his own community. In this connection we shall quote the views of three prominent men:

"Every person who invests in well-selected real estate in a growing section of a prosperous community adopts the surest and safest method of becoming independent, for real estate is the basis of all wealth."—President Roosevelt.

"Real estate is the best investment for small savings. More money is made from the rise in real estate values than all other causes combined. To speculate in stocks is risky, and even dangerous, but when you buy real estate you are buying an inheritance."—William Jennings Bryan.

"No investment on earth is so safe, so sure, so certain to enrich its owner as undeveloped realty. I always advise my friends to place their savings in realty near some growing city. There is no such savings bank anywhere."—Ex-President Cleveland.

THE GRANTING OF PATENTS TO PHYSICIANS.

"Why should not a physician enjoy by right of patent the fruits of his genius as well as anyone else?" This was the trite question recently propounded to us by a physician.

The answer to the question depends entirely upon the purpose a man has in the practice of medicine. If financial gain is his goal, then naturally he can see no wrong in an attempt at controlling the output of something intended for the benefit of the human race. If, on the other hand, he has entered the practice of his profession in the true spirit of the Hippocratic oath he has taken, he would no more think of asking of a fellow-practitioner a royalty on a mechanical idea put into working form than he would refuse to divulge without remuneration a peculiarly efficacious drug or combination of drugs in a given set of symptoms or disease. Imagine for the moment Koch demanding of the scientific world a bounty for his discovery of the

tubercle bacillus, Lister for his original work in asepsis and antisepsis, and Jenner for his discovery of vaccination. A right-minded worker in any vocation will receive his reward in one form or another just as Jenner did in his award of £10,000 from Parliament. If the compensation be not monetary, then the knowledge alone of having done mankind in general a service, or having made the world better for his existence, is a reward, the measure of which can not be taken.

That money is not only a comfort but a necessity of life there is no disputing, and the physician owes it to himself and to his family to be fairly paid for his services and skill, but that he should so debase his calling into a trade as to demand a special monetary reward for a scientific achievement, mechanical or otherwise, is certainly not in keeping with the highest ideals of our profession.

A SEQUEL TO THE DIVISION OF FEES.

Recently there has come to our notice one of the sequels of the baneful influences exerted upon the lay mind by the pernicious practice of division of fees in surgical cases.

Living in a small town, within the confines of which an unscrupulous doctor bartered in "drummed up" operative cases, a woman underwent repeated acute attacks from a chronic, recurring appendicitis and pelvic inflammation. Naturally enough, relief by surgical intervention was not accepted, because of the impression that she was merely another one of the victims intended for mulct. Subsequently she suffered with similar recurrences in two different cities, and finally in her suffering accepted operation as a *dernier ressort*. As might be surmised, she succumbed, leaving four motherless children, besides a husband, who doubtless blames the operation for the loss of his wife, whereas, in reality, a timely interval operation would, in all probability, not only have cured the patient, but prevented much needless suffering for her.

Just how long a physician believes he can pursue the nefarious practice of trafficking in the misfortunes of others without coming into his own at the hands of his clientele is a matter of little concern as compared to the greater harm he is capable of bringing upon the profession and public at large in his vicinity. The time has come when the "commission man in medicine" no longer merits the protection of honest practitioners of medicine, and the quickest and surest way of remedying the evil is by publicity. Abuses in our profession, so flagrant as this has come to

be, should no more be exempt from public scrutiny than the recently exposed wrongs in the financial world. Indeed, if we mistake not, even greater protection from such evils should be accorded the public because vital interests and not property rights are at stake. Once let the light shine in and the public will do the rest.

CHLOROFORM VS. ETHER ANESTHESIA.

It would seem that the superiority of ether over chloroform as a general anesthetic for routine work had, in point of safety, been established beyond all doubt or cavil, and yet there are those who continue to jeopardize their patients' lives three times as much with chloroform as would be done by the use of ether.

As is well known, the mortality from chloroform anesthesia has been variously estimated at from one in two thousand to one in five thousand, while that of ether has been found to be one in twelve thousand to one in twenty thousand. And not only has the ancient conception of kidney irritation by ether been overthrown, but it has been definitely proven that chloroform has not only just as marked an effect on the kidneys, but a more prolonged one. Furthermore, the observations of Bevan, Favill, and others establish beyond a question of doubt that the condition of acid intoxication or hepatic insufficiency, so much more common after chloroform than after ether, bids fair to become no negligible quantity. The only possible time when a choice might legitimately be made in favor of chloroform would be in intracranial work where the question of vascular tension might be of importance.

In view of these facts, can the surgeon who continues to demand chloroform anesthesia feel anything less than a sense of guilt for a chloroform fatality when he has at hand an equally, if not more, efficacious agent with a known mortality of only one-third that of chloroform?

SCIENTIFIC EDITORIALS

GASTRO-INTESTINAL DISEASES.

The systematic review of current medical literature tends very naturally to make one believe that this is an age in which gastro-intestinal diseases stand prominently in the foremost place of subjects which interest the progressive physician and surgeon. The advances of chemistry have converted much, that was purely theoretical and based upon hypothesis a few decades ago, into al-

most absolute knowledge. Investigators, in their study of metabolism, have made clear much that was formerly obscure. A better knowledge of chemistry, physiology and pathology, and their intimate connection in the investigation of diseases of the gastro-intestinal tract, has been of invaluable assistance to the physician and surgeon in their efforts to afford relief to suffering humanity. In addition, abdominal surgery has aided much in the endeavor to place the diagnosis and treatment of these diseases upon a firm and solid foundation. As a result of the painstaking efforts of scientific investigators, both physicians and surgeons, quite a surgical literature is to-day conspicuous. That much has already been accomplished can not be questioned; that greater advances may be expected is the candid opinion of every member of our profession.

Notwithstanding the fact that marked advances have been made; notwithstanding the fact that careful macroscopic, microscopic, bacteriologic, chemical and surgical investigations have made clear many problems; there still remain many indefinite and unsettled questions which can only be solved by a combined effort on the part of both the physician and the surgeon. In other words, not only the solution of unsettled questions, but that the rank and file of the profession may understand and fully appreciate those problems which have been solved and made clear, demands the earnest and hearty co-operation of every physician and surgeon. Until such a co-operation is accomplished I am satisfied that the general profession will occupy the same position toward many gastro-intestinal diseases that it did ten years ago.

While the majority of us believe that some diseases are purely medical, and that others are purely surgical, in character, we as a profession must recognize the fact that not a few gastro-intestinal diseases occupy a borderland position. This fact alone, it seems to me, is sufficient to justify the assertion that ideal work in the diagnosis and treatment of such diseases must of necessity demand the co-operation of both physician and surgeon.

Many vexed questions, pertaining to diagnosis and especially treatment, very naturally arise and call forth a difference of opinion between the physician and the surgeon. According to Ochsner, neither is likely to be able alone to form a just opinion, because each naturally sees principally the failures and not the successes of the other. In order that these differences may be eliminated as speedily as possible, it is essential, on the one hand, that the surgeon does not ignore the good work already accomplished by the physi-

cian, and, on the other hand, it seems most important that the physician should make a regular practice of witnessing surgical operations. Both physician and surgeon must work hand in hand to discover the etiology of a disease, to make its diagnosis and prognosis certain, and to formulate correct therapeutic indications for the same. Many of the results in the realm of gastro-intestinal diseases we owe to the physician, and many we owe to the surgeon who actually makes autopsies *in vivo*. However, in spite of the numerous researches and statistics from both sides, they have not completely elucidated many most vital questions.

Unfortunately, at the present day, in the treatment of gastro-intestinal diseases, we must recognize two extremes, namely, the surgeon who not only fails to recognize a disease as being purely medical in character, but is eager to resort to surgical interference; and, on the other hand, the physician who not only refuses to recognize the value of surgery in certain diseases, and in case he does, fails to refer his patients to the surgeon at an opportune time. Such extremes do not indicate a harmonious working together of the profession; they do not indicate a working of the physician and surgeon, hand in hand, with the idea of formulating correct therapeutic indications. Granting that there is much room for improvement on the part of both, it can not be denied that, at the present time, the surgeon's word regarding many gastro-intestinal diseases carries the weight of authority, and already almost identifies an early operation with a radical cure. However, he may any day be surprised by discoveries of progressive physicians which will cause certain operative procedures to meet the same fate as did tracheotomy in true diphtheria. While we are awaiting the arrival of this fortunate epoch, the profession as a whole, in justice to both the physician and the surgeon, must limit itself in any given case to protecting the patient from the two extremes—eagerness to operate, and failure to recognize the right time for operation.

There are probably no pages in the history of surgery that are so encumbered with descriptions of useless methods as those dealing with surgical interference in gastro-intestinal diseases. Various and numerous have been the methods of technique which have been advocated, and to-day it is an easy task to find an author who is willing to advocate something new. The ever constant and laudable striving after perfection by investigators is to be commended. The steps upon the road to success have been infinite in number, and yet they have not all been steps in a forward direc-

tion. Even to-day the subject is not free from the incursions of the eager surgeon, enthusiastic as to the claims of his newest methods, despite the fact that such methods are unnecessary. No one will deny the fact that it will be a very difficult task for a surgeon to advocate any one method which will receive universal acceptance. However, when such a method has been established "it will undoubtedly combine in the highest degree two essentials—simplicity and safety."

The same is true of the countless pages in the history of medicine that are so laden with useless descriptive methods pertaining to the diagnosis and treatment of gastro-intestinal diseases. As with the surgeon, the steps of the physician have not all been in a forward direction. Notwithstanding the great number of ingenious and complicated chemical methods which have been devised, the daily toiler in this field of work endeavors to make his diagnosis by the use of methods which are extremely simple. Success does not always follow his earnest efforts, and he is oftentimes unjustly criticized on account of his inability to make an early diagnosis of a disease, in which properly directed and early surgical interference would in all probability be followed by most brilliant results. On the other hand, we oftentimes hear unjust criticism of the surgeon for his early exploratory laparotomy in a case where the physician finds his methods insufficient for the making of a positive diagnosis. However, it is a well-known fact that where the physician shows a deficiency in his work, a careful perusal of medical literature will show a surgeon keeping pace with him.

In general, quoting Dr. George W. McCaskey's words, it may be said that every case of progressive and intractable stomach disease, especially if developing in an otherwise healthy patient, should not be allowed to continue for more than four or five weeks without an accurate diagnosis being made by a competent physician. If the patient does not improve with favorable environment and proper local and general treatment, but instead grows progressively worse, there comes a time when an exploratory laparotomy should be advised for the twofold purpose of determining the presence or absence of a neoplasm and its removal if present. The same will apply to all diseases of the gastro-intestinal tract. If such a rule were followed by every physician, the skilful and competent surgeon would be enabled to obtain results that can never be obtained in any other way.

While it is the duty of every physician to improve his methods of investigation in order that

he may do his work well; while it is his duty to assist the surgeon in securing better results, and while he deserves censure for failing to perform this duty, yet, on the other hand, the primary essential of the surgeon is that he be a competent man. He must take a broad and comprehensive view of the subject. He should show a tendency to be conservative and not too radical. His early experience and training should be of such a character as will enable him to choose wisely between the operative and non-operative. A four, eight or twelve weeks' postgraduate course will not, and does not, make him a competent surgeon.

The late Mr. Greig Smith fixed the surgeon's standard of attainments for abdominal surgery in these words: "To be prepared, at the appearance of any complication, to apply the best known surgical technics; to do what is wanted, and no more than is wanted; to have the manner and method of each procedure mentally laid down in clear and definite lines, and to perform the operation in a steady, straight-forward, workman-like manner, through the endless complications that may arise, is no trifling call on the capabilities of a human being. Much of it may be learned by intelligent practice at the expense of the patient; much may be learned by careful study and practice on the dead body, but most of all will the young surgeon derive information from close and personal attendance at the operations of our great masters."

Gastro-intestinal surgery is no longer a field for legitimate and versatile experiment. Certain fixed and useful laws and customs have been laid down by the dearly bought experience of great men. The surgeon in this field of work ought to begin fully equipped with such knowledge as has been gathered for him. Good work must necessarily imply the hearty co-operation of good, honest and competent physicians and surgeons. Both are essential; both must work hand in hand, as neither physician nor surgeon can ever hope to attain brilliant results in this work alone and unaided. ALOIS B. GRAHAM, M.D.

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EYE-STRAIN AND WHO SHOULD TREAT IT.

A PLAIN TALK TO THE GENERAL PRACTITIONER.

Every specialist should know something of general medicine, and every general practitioner should know something of the different specialties. It is a lamentable fact that the ophthalmologist finds it very difficult to induce physicians to read his papers or give him a hearing. This

comes partly from the notion that the eye is too mysterious and obscure for the average man to expect to know much regarding it. Then, too, ophthalmology has been a special field so long that it seems more divorced from general medicine than any of the other specialties.

Whenever any field is ignored by the regular it offers a good opening for the irregular and the quack. We see this in the prosperity of the osteopath, due to neglect to teach massage in our medical schools, and the prominence of the Christian Scientist, due to the indifference of physicians to the great power of the mind over the body. And now, for similar reasons, we see mechanics, merchants and peddlers encroaching upon the field of ophthalmology, due to the failure of the general physician to recognize the vital importance which eye-strain bears to eye disease and the necessity of having it corrected by medical men.

Let us consider together, then, doctors, a few of the important points about eye-strain—something you can not afford to ignore, for many of you are yourselves sufferers personally from this affliction and you have many patients who will go unrelieved unless you give this subject due attention. Seek not to brush it away with any remarks about exaggeration—that is not logical. Because some claim too much for this factor as a cause of suffering is no reason for declaring that it is not a factor, nor for ignoring its importance.

The first man to draw the attention of the profession to this matter, in any prominent way at least, was not an eye specialist but a neurologist, Dr. S. Weir Mitchell, of Philadelphia. It is true that we have to-day some oculists, like Gould, for instance, who go to an extreme in attributing so many ills to eye-strain, but many oculists, and the majority of the profession, unfortunately, go to the other extreme, almost ignoring the subject altogether—far worse for the poor sufferers as well as for the profession. The truth as usual lies between the extremes. Eye-strain does not cause all the ills of life, and its remedy, glasses, should not be regarded as a panacea. But there are many symptoms due to eye-strain, and they will not yield to any treatment but the proper adjustment of glasses. This is a common, everyday experience with the oculist, and is becoming so well known to the intelligent laity that they seek the relief experienced by their friends or suggested to their own good sense when they note the aggravation of their symptoms on using their eyes constantly, and the relief after giving them rest.

Eye-strain causes two kinds of symptoms; the

first are localized—congestion and inflammation of the eyelids, styes, chalazia, and in extreme cases possibly inflammations within the eyeball itself. The other kind of symptoms is of a reflex or nervous character. The muscles of accommodation and fixation of the eyes are constantly at work, or practically so, when we are awake, the hardest work being done, of course, when used at close range and upon fine objects. Normal eyes do this work usually without trouble. The hyperopic or short eyeball requires excessive action of the focusing muscle to make clear pictures on the retina, and the astigmatic eye requires unequal action in different meridians while the fixing muscles, if not properly balanced, are kept parallel only by constant effort. This excessive and unusual work, continual “nagging” in many cases, gives rise to nervous symptoms, most frequently frontal headache, sometimes occipital or temporal pain, occasionally nervous indigestion, dizziness, nausea, extreme nervousness and insomnia. A long continuance of such symptoms may seriously affect the general health. It is no uncommon thing to hear parents say that their children are in much better health since they began to wear glasses, and the explanation is easy, if they are relieved of headache, insomnia or nervous indigestion.

All thoughtful readers of this article will probably concede the truth and reasonableness of the above position. But what shall we say of those who claim that serious nervous diseases, even epilepsy and insanity, may be due to eye-strain? One is almost tempted to question the sanity of those making such extravagant claims. Eye-strain might aggravate such affections but surely could not cause them. Migraine probably has many causes, an inherited predisposition being a frequent factor, with indigestion, worry, overwork, eyestrain, female troubles and other factors as the exciting causes.

Now for the practical part. These symptoms of eye-strain show disturbance of function if not organic disease of an important part of the human anatomy. Their relief belongs to the domain of our profession. In other words, the prescribing of glasses for eye-strain is practicing medicine. Unfortunately our medical law originally exempted non-itinerant opticians, from fear that their opposition would defeat the bill. The last legislature did worse, creating a board of optometry to license opticians for this part of the practice of medicine.

As every physician resents the prescribing of medicine by the druggist, so every oculist has equal reason to object to the prescribing of glasses

by opticians, jewelers or peddlers, who are mechanics and merchants with no training to prepare them to do the important work of prescribing for eye-strain. Some people regard this work as simply mechanical. They forget that the eye is a complex, vital organ, that the non-medical man frequently puts glasses on eyes that need treatment for disease, and that he has no right to use cycloplegics to paralyze the accommodation, the only thorough way to determine the refraction in a large proportion of cases; for the use of these substances would be practicing medicine and would be dangerous in his hands. Innumerable instances could be given of the awful mistakes of opticians in putting glasses on people suffering from intra-ocular tumors, glaucoma, cataract, chorioiditis and other affections, and prescribing concave lenses for eyes requiring the opposite, glasses greatly aiding to suffering instead of relieving it.

Let the profession, then, unite and say that the optometry law shall be repealed and that the medical law shall be so amended as to make the prescribing of lenses for eye-strain, in law what it is in fact, the practice of medicine. Meanwhile let no doctor so stultify himself as to refer his cases of eye-strain to the optician or any other quack.

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THE ETIOLOGY OF MOTION SICKNESS.

In a review of the literature of sea-sickness or motion-sickness, as it is more properly called, one is at once impressed with the great variety and divergence of the theories that have been offered relative to its causation, and at once begins to question whether or no any one of these theories is in any degree correct. I have been forced to the conclusion that there are but few facts to be offered in support of some of these theories. That an interrupted descent of the liver, being the heaviest viscus, should serve as an etiological factor, as some have supposed, is not at all probable, since so many of the natural movements of the body involve this same principle without the resultant sickness. Neither does the disturbed pressure of fluid in the semicircular canals present a theory without fault, though I believe this to be a little nearer the truth than the former. Motion sickness sometimes results from purely visual disturbances which in no manner could change the pressure direction of the fluid in these canals. Neither can it be said that motion sickness is caused alone by either visual or auditory

disturbances, for both the blind and the deaf are susceptible.

Since the principal factor in the cause of motion sickness is motion in some form or other, and since the most pronounced symptoms are vomiting and unsteadiness of gait, no etiological theory is worthy of consideration that does not bear a direct relation to motion and to the center for vomiting situated in the fourth ventricle. The exact quality of motion concerned in this peculiar affection seems to be somewhat evasive. It has been asserted that the necessary factor is a regularity of undulation, but the theory is at once untenable when we recall that there is scarcely a more certain method of inducing motion sickness than the circle swing which is often quite free from this particular form of motion. Neither is there any rhythm or regularity in the motion of a steam or electric car, in which we not infrequently find a cause. In ship, on board which we have the most pronounced cases of motion sickness, we meet with irregularity, rhythm and undulation. The pitching of the vessel is more likely to induce the sickness than the rolling motion, and the downward motion more potent than the upward. In the old-fashioned swing it is the downward sweep which is most likely to cause a disturbance, while in the steam or electric car, in which we are least likely to meet with the sickness, we find little or none of this peculiar quality of motion. This peculiar quality of motion seems a rather indefinite term, but I am at a loss to know just how to designate it. I think I can describe it in no better terms than to say it is a combination of muscular sense and the sense of equilibrium, by muscular sense meaning that peculiar sensing of the state of muscles and just what movements are required to maintain an equilibrium; a sort of pressure sense or sense of support or confidence in one's position. This quality of motion is to my mind the one directly concerned in the causation of motion sickness.

Let us see how this view harmonizes with the anatomical and symptomatic facts of motion sickness. This so-called muscular sense is the peculiar property of the cerebellum, the posterior columns of Burdach and Goll, and the direct cerebellar tracts. These columns in their course to the brain are in close anatomical relation to the center for vomiting in the fourth ventricle, and any impressions carried along these tracts must of necessity influence this vomiting center and its blood supply, naturally stimulating it to activity. Near to this center for vomiting we have a center for sweating, and a vasomotor cen-

ter depressant in character; and in conjunction with the vomiting of motion sickness we find depression and sweating. We also have a center for co-ordination of the eyes, and the disturbance of this center gives disturbance of vision. Not infrequently it results in vomiting, unsteadiness of gait, depression, etc.

In the act of vomiting from any cause whatever we have concerned the third, fourth, fifth, sixth and eighth nerves, the vagus, the glossopharyngeal, and sometimes the nerves of the kidney or testicle. Not one of these nerves but can be traced in direct anatomical relation to the center for vomiting or indirectly through these columns of muscular sense. The effect of position in riding in a steam or electric car is offered in support of this theory. In riding with the face forward we meet the ground and coming objects in a perfectly natural manner and we are much less likely to suffer from motion sickness than if we ride backward, in which latter position the ground seems to recede from us, leaving us without support. These same effects are observed in certain patients who suffer mildly from watching moving pictures in which the observer seems to be riding on a ship or in a car, showing that the stimulus may be of a purely psychic character, no muscles being called into use to execute the imperfect orders of the imperfectly stimulated brain. Again, in the extremes of age the individual is accustomed to a sense of insecurity of position and support, and we meet with fewer cases of motion sickness in these individuals. Will any one suppose the liver of the child or the aged less likely to displacement than that of the middle-aged or that with these there is less probability of an equal distribution of fluid pressure in the semicircular canals? There is sometimes experienced something akin to motion sickness when certain individuals stand on high towers, bridges, etc. In this instance there is again a sense of insecurity, an indefinable something drawing one into the abyss. The faintness, etc., are unexplainable save on this same theory of a disturbance of the muscular sense, this time from purely psychic influences.

How these various factors operate to influence the center for vomiting is, of course, in some degree problematical, but to me the most probable solution to the question is in a theory that the continued, repeated afferent and efferent impulses necessary to a maintenance of equilibrium or sense of security of position act as a local vaso excitant and occasion a dilatation of the blood vessels of the fourth ventricle and consequently excite the vomiting and sweat centers.

I believe this theory to be still further borne out by the fact that all remedies which are of service in the treatment of this disorder act either as vaso constrictors or so depress the cerebral and cerebellar functions as to make the individual less susceptible to motion or other influences.

CHAS. H. McCULLY, M.D., Logansport.

EDITORIAL NOTES

SEVEN prominent cities in New Jersey have elected physicians as mayors. This speaks well for the good judgment of the New Jersey voters, as it also indicates an increasing willingness on the part of medical men to enter politics.

TWELVE physicians are needed to take care of the poor in the city of Toledo, Ohio. The County Infirmary Board has passed resolutions limiting the amount to be paid any one physician to \$25 for six months' service. We believe that a physician who gets up right early in the morning and is "real pert" in his work will be able to hold the job and earn at least 10 cents an hour while doing the work required by the generous Infirmary Board of Lucas County, Ohio.

BEWARE of the collection agency that requires you to pay a "membership fee" or requests you to advance money for postage or anything else. Any person or agency who will not take accounts and collect them on a straight commission basis, and without any advancement of money for any purpose, is not worthy of patronage. Accounts should not be turned over to any one for collection without first determining that the collecting agent is thoroughly responsible and that correct periodic reports of collections will be rendered.

THE next annual session of the State Association will be held at French Lick June 18 and 19. Members who desire to present papers at the meeting should have them referred promptly so that the secretary of the Association can list them on the completed program, which will be published in THE JOURNAL. County secretaries should make it a point to refer only good papers. The compilation or paper copied wholly from text-books should not be given a place on the State Association program. Generally speaking, our meetings are productive of more benefit to the members when there are fewer papers and more discussion.

DURING February several of the departments of the public schools of Fort Wayne were closed for a few days at a time on account of scarlet fever. With commendable energy and good judgment the city board of health, aided by the school board, suppressed the spread of the disease by suitable disinfection and quarantine measures. But the fact that children suffering from mild forms of scarlet fever attended school for a few days without the nature of the disease being discovered is an argument in favor of the medical inspection of our schools. We hope to see the time when this feature will be a part of the duties of all health officers, and suitable salaries paid to insure not only competency in the work, but warrant for the devotion of the entire time of the health officers to public health matters.

"HOW I CAME TO ORIGINATE OSTEOPATHY" is the title of an article by Andrew T. Still appearing in the *Ladies Home Journal*. We have always thought Mr. Bok was possessed of a fair amount of common sense and good judgment, but we are inclined to believe that he was a fit subject for a lunacy commission when he accepted for publication the article to which we refer. The rank absurdity of some of the statements and claims put forth by Still ought to have barred his article from acceptance by any level-headed editor of a lay journal having the least intention of publishing the truth. But the fact that the article is a shrewd piece of advertising for the osteopathic cult permits the query: Is it possible that Mr. Bok was paid for the publication of the article, and, if so, how much? It should have brought a large pecuniary profit.

THE latest social organization in New York is "The Association of Thaw Jurors." It will be a select organization and membership will be limited to those upon whose shoulders hung the fate of Thaw following his two trials. It is now in order for some of the acquitted murderers who have been freed by such jurors as those before whom Thaw was tried to form select (?) social organizations. Thaw, Nan Patterson, Mrs. Bradley, Mrs. McDonald and several other notorious moral degenerates who have luckily escaped the gallows and righteous punishment ought to be star performers in such an organization. The acquittal of these lecherous homicides and the maudlin sympathy bestowed upon them by a sentimental public and a sensational press is a disgrace to our courts and a reproach to our civilization.

LA GRIPPE is prevalent in various sections of Indiana. The State Board of Health in the report for January says that during the month 176 people in Indiana died from the effects of la grippe. This ought to indicate to physicians and the public that la grippe is not a trivial disease, but one which should be reckoned with as a source of serious results. The prevailing tendency is to give la grippe cases too little attention. Complete rest, warmth, suitable diet and elimination until the patient is well will go a long way toward preventing serious if not fatal complications. Above everything else, the patient should be confined indoors until well. Many persons recovering from la grippe and not considering themselves sick enough to remain indoors have suffered from serious complications from injudicious exposure and too early return to work with its drain upon an already debilitated system.

It is announced that Philadelphia has taken up modern ideas as regards membership in her county society and no longer excludes a physician from membership simply because he happens to have graduated from some school other than a regular one. In doing this the society is following the suggestion of one of its former presidents, Dr. John B. Roberts, who, in an address to the society, said that "the society should be liberal enough to accept as a member any physician whose education and personal character make him a fit associate for intelligent men." He further said that "the test of qualification for membership should not be the college from which the applicant received his diploma, but an education enabling him to understand and appreciate the science of medicine and the honest purpose to treat his patients by all means and methods which experience, investigation and research show to be serviceable."

A FEW men in medicine, like the law has in Hughes, of New York, would work wonders in freeing us of some of the evils rampant in our midst, such as the division of fees, giving of commissions, etc. While we would be the last to seek notoriety through the public press, yet the profession could well profit by Hughes' example of taking the people into confidence, as he did when exposing the insurance, beet sugar, and traction evils. And he took the pains to see that the people were correctly informed, not leaving the task to a third-rate news reporter who is looking for a "scoop." These abuses in medicine should, of course, be thoroughly discussed first

among ourselves and every attempt made at righting them without need for publicity. But that failing, the public has just as much right to know that it is at times being fraudulently dealt with by doctors as it has to demand a pure food and drug law that tells them when and how much poison they are taking.

THE manager of the Kondon Manufacturing Company of Minneapolis does not require a nerve tonic. He is sending samples of "Kondon's Catarrhal Jelly" to Indiana physicians with the recommendation that it will be found the very best remedy for chronic nasal catarrh and all catarrhal affections of the upper respiratory tract and should, therefore, be prescribed for the cure of such affections. The literature accompanying the sample says that the jelly does not contain any cocaine, morphine, chloral or other dangerous drug, but, judging from the effects of the jelly on the mucous membrane and the methods employed by most vendors of proprietary catarrh remedies, we do not feel warranted in betting any of our small change on the truthfulness of the manufacturer's statement. Anyway, the Indiana physicians will prove themselves good subjects for a lunacy commission if they use or prescribe "Kondon's Catarrhal Jelly," a secret proprietary remedy which is advertised to the public and samples of which are distributed promiscuously to the laity.

MCCLURE'S MAGAZINE deserves the unstinted support of the medical profession for the faithful portrayal of the true character and history of Christian Science and its founder, Mrs. Eddy. If Miss Milmine's treatment of the subject be accurate as to data, and we have every reason to believe that it is, it is easy to understand why this cult has seemed to flourish as it has. First, it appeals to a class of people of whom there are many who, like Mrs. Eddy herself, have, from childhood up, been hysterical and pampered, with little to divert their attention from themselves and their ills, real or imaginary. Second, whatever other faults or virtues Mrs. Eddy has possessed, she has been gifted with an unusual heritage of keen business instincts. Charity and personal consideration for others have ever occupied a place secondary to her own selfish interests, and through her indomitable will many a precocious student has been forced into the background the moment he gave promise of eclipsing his preceptor. Though to the great majority of thinking people her methods of accomplishing her ends are revolting, and her practices disgusting, yet

there are ever the blessed few who do, and probably ever will, love to be hoodwinked. What a pity that the venerable matron of many husbands (and few children) has had to be so constantly hounded by that *bête noire* to her existence, "mesmerism!"

A BILL to equalize the salaries for both sexes of public school teachers has recently been introduced in the New York legislature, and has met in opposition the argument that male teachers are, as a rule, married, with family responsibilities, while the same does not hold for teachers of the opposite sex.

Be that as it may, and putting aside the question of the equalization of salaries, we wish to call attention to the necessity for higher salaries to teachers in general. With the increased educational requirements, the lengthened time of training and the greater cost of living and acquiring a good college training, there should be a commensurate increase in the remuneration to this sacrificing profession. The time has passed when an individual with the ordinary common school education is equipped to teach our children the subjects required for college preparation. And, aside from the mere didactic learning acquired from their texts, we are expecting more and more training from our teachers. We want them to represent high standards of intelligence and refinement, to be well versed in current as well as historical events, to be alive to questions of public health and hygiene, and in every way capable of being entrusted with the training of our children in so far as it is to be carried out away from home. Hence the necessity for getting the best that can be had.

"Is it not time that we should be aroused to the importance of protecting our own interests when one of the senators of our own state, a man who has received for years the highest honors in our commonwealth, openly antagonizes the 8,000 physicians of Ohio, affronts their representatives, accuses them of ulterior motives, and, worse than these, opposes public health measures of vital importance to the well-being of our citizens, in the interests of those criminals against humanity, the selfish and soulless trade monopolies? His characteristic attempt to evade the issue by declaring that he voted for the Pure Food Law will not mislead the medical profession, which, through its representatives, watched his strenuous efforts, detecting his 'fine Italian hand' throughout in endeavoring to emasculate the bill, and finally saw him, chagrined at his defeat,

voting for the measure simply because public sentiment demanded it."—*Ohio State Medical Journal*.

Senator Foraker is no worse than many other men in Congress who believe that doctors and the humanitarian measures proposed or supported by doctors are good targets at which should be aimed the poisoned arrows of opposition. Yes, we believe it is time for the medical profession to take a hand in politics—not partisan politics, but the politics which make for the interests of the medical profession and for humanity.

AN OFFICER in one of the state medical associations in the south writes us as follows:

"Your Council did an excellent thing the other day when it resolved to inquire into the position of every candidate offering himself for political office in your state, in order to ascertain the position upon matters relating to the medical profession and the public health. The question of the doctor in politics is an important one, and within the proper limitations it is eminently desirable that the doctors take note of political exigencies and necessities. We have been pursuing this principle for nearly two years in our state, with the result that this year the legislature has just given us everything we asked for without a word of important opposition."

We might quote similar sentiments from letters received from other medical men outside of Indiana. It all indicates that the doctor is taking a great interest in politics, and purely with a view to benefiting the medical profession. No other organization of men, from hod-carriers to ministers, have so thoroughly ignored the question of politics, and it is high time that medical men now take such an interest as will insure some attention on the part of politicians to those interests which are of vital concern to the medical profession.

THE JOURNAL is not going to take a hand in partisan politics, and will not recognize any politician because of his party affiliation, but it will discuss the question of the fitness of men in politics, and the interests they represent, so far as medical affairs are concerned, and this discussion will be without fear or favor.

DR. J. N. HURTY, Secretary of the State Board of Health, has recently inspected the public schools of Terre Haute and found a condition of affairs there which is not conducive to good health for school children. Some of the school buildings were found in a dilapidated condition, the rooms poorly ventilated and heated, and in some of the schools pupils were found in such a

condition of ill health as to warrant the services of a physician. In an address before the school board and citizens of Terre Haute, Dr. Hurty pointed out the defects and said that the secret of betterment of the conditions would be found in the establishment of regular medical school inspection.

It is hoped that Dr. Hurty will inspect the public schools in other cities and towns of the state, as we believe that the conditions found at Terre Haute are no worse than will be found in nine-tenths of the cities and towns of Indiana. By his plain talks to school boards and the public Dr. Hurty can arouse a sentiment among the people in favor of the medical inspection of our schools, and with the influence of the medical profession back of him it ought to be possible to secure laws and ordinances providing for this much needed feature.

In our judgment, the regular medical inspection of schools should be in the hands of county and municipal boards of health, acting under the advice and direction of the State Board of Health. The officers entrusted with this work should be selected because of their competency and peculiar fitness for the position, and they should be paid salaries sufficient to make it possible to enlist their entire time in the work.

SOME of the agents of life insurance companies paying but \$3 for medical examinations are now saying that their companies pay \$5 for a medical examination. The doctor who puts his confidence in such a statement without having some written expression of opinion from the company sometimes finds to his sorrow that his bills for life insurance examinations are paid on a basis of \$3 for each examination. Examiners should also be on the lookout for companies that pay \$5 in some states and \$3 in other states. The simplest way to avoid being imposed upon by either agents or companies is to have a written statement from the insurance company seeking medical services to the effect that \$5 will be paid for any life insurance examination. If this policy is adopted it will prevent some of the life insurance companies from securing competent examiners until they change their medical examination fees, but the company which will not pay \$5 for a life insurance examination is not entitled to the services of any reputable and experienced physician, and the life insurance companies that secure cheap medical examiners through a sense of economy only are unsafe companies and the public should know the fact. So far as we know

there is not a life insurance company organized in Indiana that pays a respectable fee for medical examination. We know that in some portions of this state these companies have accepted examiners of inferior qualifications because the better physicians would not sell their services for the small fees offered. This means the possibility of acceptance of bad risks and attending great losses to the companies, which they deserve for their short-sighted policy. It is up to the medical men of Indiana to unite on a policy which will place the Indiana companies in a position where they will see the error of such false economy.

IN RESPONSE to a letter from a county society secretary asking for information concerning his society, we have received a letter which we think deserves publicity. The letter, in part, is as follows:

"In answer to your favor of recent date I am sorry to be obliged to make the following statement, but the facts seem to warrant it: Our society exists in name only. I took it upon myself to pay the dues of the members accredited to this county. If I never receive return from said accredited members I am free to say that it would be no more than has occurred before. It is supposed that we have four meetings yearly, but the fact is we have no meetings, and if I should drop out there would be no society.

"I am the youngest man practicing medicine in the county, but, as I am 50 years past, that does not count for much for men of up-to-date practices and the possession of advanced ideas concerning medicine, as I am the only one owning a microscope and a reasonably good library. Most of the physicians in the county meet the question of maintaining a society with the expression, 'What's the use? There's nothing in it.' These men do not hesitate to freely criticize the methods and work of others, and they deliberately seek to secure the patrons of other physicians or assume charge of the cases of other physicians in a most unethical way. They even, in ignorance or through intention, make such diagnoses as swinepox, waterpox, Cuban itch, and call smallpox chickenpox, etc. To those families who have contagious diseases, properly diagnosed and quarantined, these physicians send word that if other doctors were employed less trouble would be encountered with quarantine laws. These men look with disgust upon any proposition to maintain a medical society, and yet pretend to be reputable, regular practitioners of medicine.

Now, with this statement of facts, can you suggest a remedy? I can't."

We sympathize with any progressive, ethical physician who finds it necessary to live in a community where medical affairs are in the condition above described. Fortunately there are only a few such communities in the State of Indiana, and we hope that as the organization movement spreads over the state the few communities of this character will be wiped out altogether. We contend that any reputable medical man with the slightest spark of enterprise in him can alone succeed in making ignorance and unethical conduct decidedly unpopular with the people of his community, providing he so conducts himself that the people of his community are able to distinguish between the good and the bad. We admit that it is discouraging for a man who tries to do the right thing to have to contend with such embarrassing conditions, but it ought not prevent the following of right rules of conduct. It is far easier to fall into the rut with others than keep out of it, but in the end the example of progressiveness and adherence to ethical practices has its influence in stimulating others to emulate the example. We, therefore, suggest to our medical friend who is laboring under such disadvantages to keep up the good work and eventually he will secure his reward. Incidentally we hope to enlist in his support the good offices of the councilor of the district in which these unfortunate medical men live and the help and encouragement of active and influential members of societies in adjoining counties. Such a county needs evangelistic work, and we hope that we may be able to supply the need, and that later we shall be able to report that there has been a change of sentiment and action as a result of our efforts.

CORRESPONDENCE

DEATH FROM CHLOROFORM ANESTHESIA.

GREENSBURG, IND., Jan. 30, 1908.

To the Editor:—I regret to make the following report of a death from chloroform anesthesia, but duty to the profession compels it.

History.—Harold D., aged almost 6, when a few months old, was severely burned in the right hand and to a lesser degree on the right side of the face. Otherwise he gave a negative history.

Examination.—With the exception of a slightly noticeable scar on the right side of his face and a deformed right hand he was a well-devel-

oped and a perfectly healthy boy. The deformity was due to the contraction of the scar tissue, leaving the little and ring fingers almost wholly contracted, the middle finger about half contracted, while the index finger was only slightly contracted. All the joints were free and movable. Operation was advised and both mother and child were anxious that it be done. On Jan. 22, 1908, the operation was done under chloroform anesthesia. My confrère, Dr. R. M. Thomas, who has given chloroform hundreds of times, a man who is exceedingly careful in all his work, administered the anesthetic. The patient took the anesthetic beautifully, his breathing was even and regular at all times, his pulse was continuously steady and of good quality. Within 12 to 15 minutes from the beginning of the anesthetic, without warning, the patient ceased breathing and, do all we could, we could not resuscitate him, though his radial pulse was perceptible for nearly a minute longer. Evidently it was a clear case of paralysis of the respiratory center.

CURTIS BLAND, M.D.

REPORT OF A CASE OF HEART-BLOCK.

FORT WAYNE, IND., Feb. 27, 1908.

To the Editor:—The following report of a case of heart-block may be of sufficient interest to warrant publication:

March 9, 1907. Patient, Mr. S., aged 65, laborer. Father killed at age of 71. Mother died at age of 66, cause unknown. Wife died at 40 years of age of puerperal fever. Has one boy, aged 26, and one girl, aged 17 years, both in good health. Wife never had any miscarriages. Last child was born dead. Has always worked hard. Very moderate user of alcohol. Forty years ago was struck on the right side of the head and was unconscious ten minutes. No venereal diseases. Gets up once in the night to void urine. In excellent health until present illness, which began one week ago, when he suddenly became dizzy, fell down and remained unconscious about half a minute. No convulsion or stupor afterward. Since then has had several dizzy spells, but did not fall until yesterday.

Physical examination shows a well-nourished man, with well-developed muscles and good color. Pupils equal and react to light and convergence. No Romberg's sign. Knee-jerks normal. Sensation to pain, touch, and temperature normal. Marked arcus senilis, both eyes. Temporal arteries barely palpable. Lungs negative. Heart apex in nipple line in sixth interspace. Some accentuation of second sound at apex. Pulse, 53 per minute. Tension not marked to touch.

Slight systolic murmur at apex, transmitted $1\frac{1}{2}$ in. into axilla. Blood pressure, sitting (Riva Rocce), 190 mm. Weight one year ago, 157 pounds. Present weight, 147 pounds. Urinalysis—Amount in 24 hours, 3 pints; specific gravity, 1023; bare trace of albumin; no casts, no sugar. Given 1 drop spt. glonoin, t. i. d.

March 16, 1907.—Reports attacks not so numerous. Blood pressure, 150 mm.

Dec. 25, 1907.—Attack of influenza, during which dizzy spells were somewhat more frequent.

Jan. 13, 1908, 10 a. m.—Called hurriedly to see him. He had taken by mistake a teaspoonful of potassium nitrate at 7:30 a. m. At 8 o'clock a. m. had a severe dizzy spell and continued to have them every few minutes until 1 o'clock p. m. He was pale and in a good deal of distress. Rational during attack; no convulsions. Radial pulse, 23 per minute. Venous pulse in neck, 108 per minute. During a severe dizzy spell radial pulse was 18 per minute, venous pulse in neck 120 per minute. With the stethoscope at the apex and a finger on the radial artery, a distinct first and second sound could be heard corresponding with the radial pulse. In the intervals of the radial pulse faint sounds could be heard corresponding to the venous pulsations in the neck. These sounds were heard more distinctly with the bell of the stethoscope at the base of the heart. At 1 p. m. he had a bowel movement, passed considerable gas, and from then on had no more attacks that day.

CHAS. G. BEALL, M.D.

DEATHS

DR. W. H. REED died at his home in Hartford City, February 18, aged 54 years. He was a graduate of the Curtis School of Medicine, which was formerly located at Marion.

DR. EDWARD WALKER died at his residence in Delphi, Feb. 16, 1908. He was born in Erie County, Ohio, March 14, 1829. By the death of Dr. Walker, Carroll County is left without a representative of the old pioneer doctors.

DR. THOS. C. NEAT, born April 21, 1839, at Frankfort, Ky., died Feb. 1, 1908, at his home in New Albany, Ind., after three days' illness due to uremic poisoning. Dr. Neat graduated in Cincinnati and was a military surgeon in the Civil War.

DR. S. L. BROULETTE died February 2 at his home near Clay City, aged 65. He was a grad-

nate of the Medical College of Ohio, and for many years was a successful practitioner. He was attacked last year with a malady which proved to be malignant and fatal.

DR. ELMER SHIRTS died at his home in Bloomfield, Ind., Feb. 6, 1908, aged 46 years. The immediate cause of death was edema of the glottis and larynx as a result of neurotic edema angiosa. He was a member of his county and state medical associations, and at the time of his death was treasurer of the Green County Medical Society. He graduated from the Kentucky School of Medicine and for several years practiced medicine at Lyons, Ind.

PERSONALS

DR. A. B. KNAPP, of Washington, Ind., is in the South for his health.

DR. MAYFIELD, late of the Soldiers' Home in Lafayette, has located in Brookville.

DR. JAMES A. COMSTOCK, of Greenfield, has been ill for several weeks with sciatica.

DR. JOHN A. LITTLE, of Logansport, has returned from an extended vacation trip throughout the West.

DR. T. R. COOK, formerly of Solsberry, has been admitted as a member of the Clay County Medical Society.

DR. K. K. WHELOCK, of Fort Wayne, has returned from Texas, where he visited for several weeks.

MRS. EMMA E. DRYER, wife of Dr. D. W. Dryer, of LaGrange, died at her home Friday morning, March 6, aged 42 years.

DR. D. M. SHOEMAKER, of Brookville, has recently retired from the practice of medicine and gone to live with his son in Chicago.

DR. Z. M. BEAMAN removed from Urbana to North Manchester in December. The doctor was of the 1906 class, Indiana Medical College.

DR. E. R. GIBBS, of Greenfield, secretary-treasurer of the Hancock County Medical Society, has been ill for the last few weeks with mumps.

DR. WARREN R. KING, of Greenfield, has accepted an appointment as assistant surgeon at the Soldiers' Home, Lafayette, Ind., to begin with February 20.

DR. LEILA ANDREWS, formerly located at North Manchester, is now located in Oklahoma City, Okla. She was a very prominent member of the Wabash County Society.

DR. W. D. WEIS has been appointed secretary of the Board of Health of Hammond. He has recently returned from a two weeks' visit at the Mayo clinics at Rochester, Minn.

DR. J. S. COVERDALE, of Decatur, who has been a sufferer from bronchial asthma during the winter, has gone south for rest and recuperation. His son, Dr. Earl G. Coverdale, will look after his business in his absence.

DR. EARL G. COVERDALE has just returned from Chicago, where he has had a position as interne in the Eye, Ear, Nose and Throat Hospital. He will be associated with his father, Dr. J. S. Coverdale, but will make a specialty of eye, ear, nose and throat diseases.

NEWS, NOTES AND COMMENTS

THE graduating exercises of the Hope Hospital Training School for Nurses at Fort Wayne were held on February 23 and 24. A class of ten received degrees.

THE Indiana State Nurses' Association will hold a regular meeting at Fort Wayne, Friday and Saturday, March 27 and 28. All nurses of the state are cordially invited to attend.

AGITATION has been started toward having a new and much-needed pavilion for contagious diseases, other than smallpox, on the City Hospital grounds in Indianapolis, but sufficiently removed from the main building.

DR. W. A. EVANS, Health Commissioner of Chicago, has been visiting and studying the sanitary conditions of all Indiana cities along the lake shore. The prevailing typhoid fever epidemic has been the special object of study.

THE annual meeting of the Eighth District Medical Society will be held at Portland, April 16, 1908. The morning session will be devoted to a symposium on "Race Suicide." The banquet

at noon will be followed by the customary series of after-dinner speeches.

DR. J. N. McCORMACK gave a very interesting and entertaining lecture before the Farmers' Institute at the Opera House in Seymour, Ind., on the evening of January 31. The Opera House was crowded and the audience listened with marked attention to the speaker's remarks.

MRS. J. E. MORRIS, wife of Dr. J. E. Morris, the oldest physician of the Union County Medical Society, died at her home in Liberty, February 4. Mrs. Morris will be deeply mourned by the large circle of friends who have known her during her more than 40 years' residence in Liberty.

THE Hodgkins Fund Prize of \$1,500 is offered by the Smithsonian Institution, Washington, D. C., for the best treatise that may be submitted to the International Congress on Tuberculosis, which meets in Washington, Sept. 21 to Oct. 12, 1908, on the subject, "On the Relation of Atmospheric Air to Tuberculosis."

THE doctors of Charles City, Iowa, adopted a fee bill and entered into an agreement to maintain a certain standard of fees. Several of them have since been indicted on the charge of attempting to fix, regulate, and maintain prices. The case will be carried to the Supreme Court to determine whether the anti-trust laws have been broken.

THE physicians of one of the suburbs of Paris have recently adopted the following schedule of fees (the equivalent in U. S. money is given):

For ordinary day visits to laborers, 60 cents; to small merchants and salaried clerks, 80 cents; to large manufacturers, merchants and rich land holders, \$1.00. From 10 p. m. to 7 a. m., for each visit, \$2.

THE committee of arrangements for the meeting of the State Association to be held at French Lick, June 18 and 19, has decided to issue a handsome souvenir program. The program, aside from giving information concerning the meeting, railroad rates and connections, hotels and other items of interest, will contain ethical advertising, the income from which will be used to defray the expenses of the meeting.

EXAMINATION for internes on the house staff of the City Hospital, New York, will be held on

March 27 and 28 of this year in New York City. The City Hospital has a large general service, with about 800 beds, comprising all branches of medicine, and the length of service is 18 months. All applications for the position should be addressed to the chairman of the Executive Committee, Dr. Smith Ely Jelliffe, 64 West Fifty-sixth street, New York.

THE Middle Section of the American Laryngological, Rhinological and Otological Society held an annual meeting at Indianapolis on February 22. The meeting was devoted to a symposium on "The Suppurative Diseases of the Temporal Bone." Of the Indiana physicians on the program, Dr. George F. Keiper, of Lafayette, presented a paper on "The Treatment Other Than Surgical of Suppurative Diseases of the Temporal Bone," and Dr. John J. Kyle, of Indianapolis, presented a paper on "The Radical Mastoid Operation."

A SERIES of public lectures is being given in the Public Library Building at Chicago under the auspices of the Chicago Medical Society. In December the following lectures were given: "The Method by Which Insects Carry Disease," by Dr. Howard T. Ricketts; "The Importance of Proper Ventilation in the Dwelling," by Dr. Sanger Brown, and "The Use and Abuse of the Eyes; Why So Many of Us Are Wearing Glasses," by Dr. Willis O. Nance. Other public lectures under the auspices of the society will be given throughout this year.

WE ARE far from constituting ourselves the champions of Christian Science, or blinding our own or others' eyes to its glaring inconsistencies and dangerous springs of action. But we have repeatedly asserted, and we now reiterate, that if upon its essential concept there have been grafted wild absurdities and hazardous practices it is chiefly because medical science, which should have been the logical exponent of the truths which Christian Science has distorted, has stupidly ignored their significance and neglected their application.—*Medical Standard*.

THE Philadelphia Medical Schools, at an informal conference, adopted, through their leading representatives, the following resolution:

"Resolved, That it is of the utmost importance for accuracy in prescribing, and in the treatment of disease, that students of medicine be instructed fully as to those portions of the United States Pharmacopeia which are of value to the

practitioner, and that members of the medical profession be urged to prescribe the preparations of that publication; and, further, that this resolution be forwarded to the medical and pharmaceutical journals in the United States."

THE dentists of the United States Army are anxious to be established as a department of the army with permanent locations. They are now hurried from America to the Philippines, to Panama, to Cuba, to Alaska and all parts of the United States on a moment's notice and there is no apparent head to the dental service. Attorneys representing the dentists are now in Washington in consultation with congressmen and senators, endeavoring to secure legislation which will provide for a dental department having similar rules and regulations as now pertain to the medical department.

A MOVEMENT is on foot for the organization of a health board of municipalities along the south end of Lake Michigan, for the purpose of devising ways and means of disposing of sewage instead of permitting it to flow into the lake to contaminate the people's water supply. At a recent meeting held in Michigan City, it was decided to call together the health boards and other officers of the towns along the south end of the lake to meet in conjunction with the state boards of Indiana and Illinois, to promote the movement to protect the water supply of the lake from further contamination. Dr. W. A. Evans, Health Commissioner of Chicago, is the prime mover in the plan.

THE members of the Carlisle County Medical Society (Kentucky) have adopted a fee bill, and plans for the distribution of "information lists" concerning the credit of patrons, which promises to result in economic returns to the members. Each member binds himself to report the names of patrons who have persistently refused or neglected to settle accounts for medical or surgical services rendered, to render statements to his patrons at least quarterly, to abide by the minimum fees as set forth in the fee bill adopted, and to uphold and abide by the code of ethics. The penalty for violation of the agreement is a fine of from \$5 to \$10, or expulsion from the society; as may be determined by a two-thirds vote of the members.

ROCKEFELLER is just now in the limelight and it will be of interest to note what he has done for medicine.

He has given away 70 per cent. of his Standard Oil income to public objects, and the amount

reaches \$102,055,000. Those particularly applied to medical interests are: University of Chicago, \$21,400,000; Rush Medical College, \$6,000,000; Institute for Medical Research, \$2,000,000; Harvard University, \$1,000,000; Johns Hopkins, \$500,000; Indiana University, \$50,000. Perhaps some of the miscellaneous gifts not itemized might include some under this head, and the amount prior to 1892 was \$7,000,000. Mr. Rockefeller could not do better than endow several large hospitals.—*Central States Medical Monitor*.

THE following appropriations have been made by the Philippine Commission for the Philippine Medical College: Thirty-three thousand six hundred and twenty dollars for salaries and wages; \$26,574 for contingent expenses; \$720 for maintenance of internes, and \$280 for the purchase of elinical apparatus. An appropriation of \$12,500 was also made for the endowment of beds in St. Paul's Hospital. The advisory board has suggested to the board of control that a school of midwifery be established in connection with the school. The new hospital, for which \$390,000 has recently been appropriated, will contain a maternity ward and, on the establishment of that ward, the necessary material for giving practical instruction in midwifery will be available.—*Chicago Medical Recorder*.

THE American Association for the Advancement of Science held its fifty-eighth annual meeting in Chicago during the week beginning Dec. 30, 1907, and was one of the largest and most important gatherings of scientific men that has taken place in this country, over two thousand being in attendance. The Association performs a highly important service for the advancement of science and the diffusion of knowledge. The annual meetings furnish a clearing-house to which men of science of the whole country bring the results of the year's work, and from which they return to their homes with a renewed interest in research. These meetings are held in widely separated places and consequently extend an intelligent interest in science and lead to a greater appreciation of the importance.

THE physicians of Ohio are planning to introduce in the next session of their legislature the following bills: One to regulate the manufacture and sale of proprietary medicines within the state, securing the full benefits of the provisions of the National Food and Drugs Act; a

bill creating the position of medical officer of health; a bill amending the law regarding criminal abortion; a bill forbidding the advertisement in the public press and elsewhere of cures of venereal diseases and of flagrant medical frauds; a bill providing for the registration of vital statistics; a bill re-establishing a local board of health for cities under the merit system, and a bill providing for the appointment of all public medical officers from nominations made by the state and county medical societies.—*The Journal of the A. M. A.*

EXTRACT from cable dispatch to *Cincinnati Enquirer* of October 26, from Manila, P. I., relative to Secretary W. H. Taft:

"The secretary also inspected the newly established medical school in Manila. Speaking to the medical students, he said he considered this new work fully as important as any work taken up by the government, and that the islands were in need of physicians and a hygienic system of living. He paid tribute to American doctors. Without the knowledge of tropical diseases gained by American doctors during the Spanish-American war, the construction of the Panama Canal would have been impossible, but with this knowledge they have been able to clean up the canal zone and make it healthy, and the completion of the canal is assured. In conclusion, the secretary complimented the medical school upon the harmonious cooperation of American and Filipino instructors."—*Lancet-Clinic*.

UNDER the auspices of Rush Medical College, Northwestern University Medical School, College of Physicians and Surgeons, Chicago Medical Society, Chicago Surgical Society, and the Nicholas Senn Club, memorial services to the late Dr. Nicholas Senn were held at the Music Hall, Fine Arts Building, Chicago, Sunday, February 2, at 2:45 p. m.

Prof. Albion W. Small, of the University of Chicago, acted as chairman. Dr. Frank Billings, speaking for Rush Medical College, took as his subject "Nicholas Senn as a Teacher." Dr. Albert J. Ochsner, representing the Chicago Surgical Society, spoke on the subject "Nicholas Senn as a Surgeon." Dr. William E. Quine, representing the College of Physicians and Surgeons, spoke on "Nicholas Senn as a Man." Dr. Henry B. Favill, representing the Chicago Medical Society, spoke on "Nicholas Senn as a Physician," and Dr. D. R. Brower, representing the Nicholas Senn Club, spoke on "Nicholas Senn as a Traveler."

THE Supreme Court of Ohio has recently decided that witnesses called as experts can be paid only ordinary witness fees and not the special fees which have been allowed them as experts. The decision was made by the Supreme Court in the case involving the payment of \$25 per day fees to Drs. Baldwin and Parker in the Taylor murder trial. This means that physicians in the future must see that they have a clear and binding understanding for special witness fees before agreeing to give expert testimony. Before the service is rendered the prosecutor deals in glittering generalities; he does not wish to agree to pay a certain sum lest "it might prejudice the case in the minds of the jury," but assures you that "you may rely upon it that it will be all right." Sometimes it is, and sometimes it isn't, and it behooves the members of the medical profession to protect themselves in advance and in some way see to it that they may have some assurance of fair remuneration for the responsibility incurred in the giving of expert testimony and for actual time lost.—*Abs. Ohio State Medical Journal*.

A PHYSICIAN who crossed the ocean upon the same steamer with Dr. Senn shows the characteristics of Dr. Senn by the following report: "Upon these occasions, when other men would have been absorbing health and vitality from the beauties of the ocean and the quiet monotony of the journey, Dr. Senn was found from 8 o'clock in the morning until 11 o'clock at night, day after day, in the smoking room of the ship, with a pile of books, manuscripts, notes and references, utterly and completely absorbed in his work, writing, thinking and studying, while he smoked his famous brand of Mayville cigars, utterly unconscious of the noise and clamor of the games of other men going on about him, self-contained, absorbed, deep in the world of thought and work, so far removed from his surroundings that no greater incongruity could possibly be imagined." And what is true of Dr. Senn on ship board was true of Dr. Senn in his library, on the train, in the hotel or wherever he might be. His capacity for work was unbounded, and no limitation of time, marked by the hands of the clock or by the rising and setting of the sun, in any wise modified his persistent impulse for work when work was to be done—and with Senn there was always work to be done.—*Abs. Wisconsin Medical Journal*.

12, 1908. This congress meets once in three years. It has never met in America, and after this year may not meet in this country for many years to come. The congress will carry on for three weeks public discussions of the tuberculosis problem, led by the most eminent authorities on this subject in this and other countries. Official delegates will be present from nearly all civilized countries. There will be a course of special lectures, to which all members of the congress and the general public are invited. The congress will be divided into sections, giving ample scope for perception of both scientific and lay members. There will be a great tuberculosis exposition in which one can see what is going on the world around in the campaign against tuberculosis. There will also be clinics and demonstrations throughout the whole period of three weeks, giving medical and lay delegates object lessons on the causes and prevention of tuberculosis. The proceedings of this congress will require four volumes, and these are free to all members of the congress who have paid their membership fee of \$5. Applications for membership should be sent to Dr. John S. Fulton, Secretary General, 714 Colorado Building, Washington, D. C.

THE OLD WOMEN.—They have been with us since Eve grew old, and, like the poor, will always abide. If they are such an evil as most doctors claim they are, then it is pertinent to ask, What can be done with them? Many times a dismissal of them will carry with them the patient. We must learn to use them to our own advantage, and make friends and advertising mediums out of them. They are the critics who must be reckoned with. Under no circumstances should you lose the mastery of the situation with these critics looking on. Give them all something to do. One heating cloths, another brings a glass of water, and an errand or task for each—anything to keep them busy. They will sing your praises all over town if handled right. Do not forget to tell them, when you go, how much help they have been to you. The "old women" can make or mar your career; utilize them to make it. A few moments' conversation with them, directed along the right spirit, with a little tact, will remove the "thorn in the flesh" to most doctors. They can be made just so many solicitors if treated with consideration and policy. Few doctors realize what a field there is here for helping themselves. Get wise—make friends; master all forces; direct sentiment. Talkers either help or hurt; it lies with you.—*Chicago Medical Times*.

THE International Congress on Tuberculosis will meet in Washington, D. C., Sept. 21 to Oct.

THE Nickel Plate Railroad had a wreck near Fort Wayne early in the fall of 1907. Several Fort Wayne physicians and surgeons were called to assist in caring for the injured. It fell to the lot of Dr. Charles E. Barnett to care for a woman who had been severely injured about the head. Numerous cuts about the eyes, nose, ears and scalp were given attention. There was also a fracture of the skull which demanded the surgeon's consideration. A bill for \$100 covering the services rendered was presented the railroad company and refused payment. Suit was brought against the company and the same has recently been decided by Judge Heaton, of the Superior Court, by allowing the full amount of the claim. In making the decision Judge Heaton said:

"How shall we decide when doctors disagree? Six eminent doctors say plaintiff should have \$100 or more. Six doctors of equal credit, in the judgment of the court, say he should have \$50 or less. A lady is injured in a railroad wreck. Her face is cut, ears and nose torn and skull fractured. The plaintiff is selected by Dr. Dinnen, the chief surgeon of the defendant railroad, to treat these injuries, and no fault is found with the skill or ability with which plaintiff performed that service. I conclude that a high degree of skill was required to treat such injuries to avoid leaving scars or paralysis of facial muscles and to treat the fractured skull. Dr. Barnett, the plaintiff, testifies as to the character of the injuries, the service performed, and values his services at \$100. In the opinion of the court, that is a very reasonable estimate. I will not render a compromise decision. I give judgment for \$100."

SOCIETY PROCEEDINGS

ADAMS COUNTY.

The Adams County Medical Society met in regular session on February 14, with most of the Decatur members, and Dr. Wilson, of Berne, present. Dr. Waldo E. Smith read a very interesting and comprehensive paper on "The Physiology of Digestion," which was much appreciated by those present. Adjourned.

MARIE L. HOLLOWAY, Sec.

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of Jan. 28, 1908.)

Society called to order by President Calvin, with over 100 members and guests present. Minutes of previous two meetings read and approved. Application of Dr. Frank Greenwell was read and reported to the board of censors. The meeting was a joint one between the physicians and lawyers.

The Legal Aspect of Malpractice was the subject of an address by Attorney H. W. Townsend, in which

he presented the subject from a legal standpoint. The speaker said that in looking up the records of jurisprudence he was able to find only about twenty-four malpractice suits entered in the courts of Indiana, and among these there is just one for the improper administration of medicines, all of the others being surgical or quasi-surgical cases. Eighteen of the cases were affirmed in the lower court, and twelve of the eighteen in the higher court. The reason that there is such a large proportion of cases that are surgical instead of medical is that the layman is not so able to tell that there has been a misapplication of remedies while it is comparatively easy to detect defects resulting from surgical work. The law only requires that a practitioner shall have the average skill of practitioners in such locations generally.

There are two forms of action: One for the violation of a contract, and this may be brought any time within six years, and the other for negligence, and this may be brought at any time within two years. The speaker said that if physicians were more active in making prompt collections there would be fewer malpractice suits. He said that if the physician has any idea that the patient is going to enter suit for violation of contract or for negligence in treatment, it is better for the physician to get his bill in first and collect for the services rendered, even if collection has to be forced by legal process. If the doctor sues for his bill and the patient swears that the services were worthless, but notwithstanding this fact the doctor gets a judgment, such judgment will be a bar against the patient's case should there be a suit for malpractice. It is the duty of the patient to follow the instructions of the doctor, and it is the duty of the doctor to be very particular in giving instructions to the patient.

From a legal standpoint, if a patient is of sound mind and mature judgment, and insists on an operation against the judgment of the doctor, in law the doctor is not responsible for the performance of such operation. In this connection a case was cited in which the lower court found in favor of the patient, a judgment of \$3,000 being rendered, but this verdict was reversed by the higher courts. In giving gratuitous services the doctor is just as liable as if he were paid for the services, and it does not matter by whom employed. A doctor called in consultation is also liable for bad results occurring before or at the time of consultation, providing he makes no effort to remedy such bad results. In this connection a case was cited in which a Vermont surgeon set a fractured limb improperly, and a surgeon who saw the case later and might have corrected the deformity, but did not do so, was held liable. In Pennsylvania a doctor set a dislocated arm and it failed to heal in the proper manner. Another physician was consulted in his absence and anesthesia was administered with the intention of reducing the dislocation. The father would not allow the operation. In the suit against the original surgeon for malpractice, the courts held that the father was not required to permit the second operation in order to do away with the liability attached to the first operation.

A physician is not liable for the actions of a nurse unless the said nurse is working under the directions of the physician. Regarding the responsibility for the care of sponges during an operation, the doctor, acc-

for malpractice, all prejudices are in favor of the lay witness, as an educated witness is the worst witness to make an impression on a jury. An educated witness gets no show on cross-examination.

The Medical Aspect of Malpractice was taken up by Dr. M. F. Porter. The speaker said that a doctor who is conscientious and capable may be sued or threatened with a suit for malpractice, but is in no danger of being mulcted. The man who undertakes to do a thing he is not competent to do is either ignorant or dishonest, and lays himself liable to malpractice suits and to convictions thereon. Honesty and competency, then, are the great safeguards against annoyance from malpractice suits. These safeguards are practically perfect in the prevention of verdicts against one for malpractice, but they frequently fail to prevent the threatening of suits.

Simply stated, then, the law requires of the doctor honesty and competency. Possibly there are degrees or grades of honesty, as there are degrees and grades of light and shade, but personally, I hold that a man is either honest or dishonest, just as a given surface may be said to be black or not black, or white or not white. A man may be more or less dishonest than another, but if he be honest, he is honest, and there is the end, and no man can go farther on that road. Degrees of dishonesty there certainly are, but degrees of honesty are to my mind impossible. Two equally honest men may differ much in their ethical concepts and conduct, but this signifies different degrees of ethical perception, different degrees of knowledge, not different grades of right. The honest man may want to do right, but because of lack of wisdom do wrong.

How much must a doctor know of the known in medicine to be competent in the eyes of the law? This depends much on where the particular doctor, whose competency is to be judged, lives. At first thought this seems strange, and more un-American than strange, for it would seem that human life and comfort should have the same value in the eyes of the law in Puckerbrush that it has in the largest city, and the keynote of our Constitution declares that all men are born equal. Yet if one stops to think he will conclude that the gravitation of the best men in all walks of life is toward certain centers offering better or more desirable environment, and that this gravitation is as natural, and therefore as inevitable, as the gravitation of the finer grains to the bottom of the sand pile, and that therefore the requirement of the law which provides that to be competent a doctor must be possessed of a degree of knowledge which will measure up to the average of that possessed by his confrères is right and reasonable.

I was once told by an eminent jurist that law in its essence is common sense. This is of course equivalent to saying that some of the legislative enactments are not law, which is of course true. Doctors who are both competent and conscientious are not infrequently sued for malpractice. Usually the problem mathematically stated is about as follows: A mean, meddling doctor + shyster lawyer = a suit for malpractice. Sometimes there is to be added a black-mailer, but perhaps more often a man too ignorant to appreciate the limitations of medical science and therefore honestly of the opinion that he has been maltreated.

I regret that honesty compels me to say that the first cause in many malpractice suits is a doctor, and

more to be regretted still is the fact that this doctor's pernicious activity is usually due to a small soul, combined with mental myopia. "'Tis true, and pity 'tis, 'tis true," a man may be mean enough to instigate a suit against a fellow-practitioner, but he will not do it if he is wise, for he knows that "crows come home to roost." Hence, I say that the instigator of these suits is usually both mean and lacking in common sense. Inadvertent remarks, made without more or less forethought, but misinterpreted, is another one of the causes of the institution of malpractice suits. Over-anxiety on the part of the doctor, interpreted by the patient as a lack of knowledge or skill on the doctor's part, is another of the causes of the institution of malpractice suits. The best prophylaxis is that the doctor shall know himself, which means that he shall know his own limitations and the work for which he is competent, as well as that for which he is not competent, and to do such work as well as those in the neighborhood in which he lives.

Envy and jealousy on the part of physicians is not infrequently an inciting cause for malpractice suits. The man who succeeds is not infrequently made the target for uncomplimentary remarks and criticism by his envious confrères, and this may lead to a suit for malpractice on the part of some ignorant or misguided patient.

Fractures are among the most difficult surgical conditions the surgeon meets, and yet the popular idea is that fractures are rather trivial affairs. A doctor may repair a broken limb as well as anyone can possibly do it, and yet the limb may not look good and may be practically useless. To-day it would be difficult to convince an intelligent judge or jury that all had been done that could be done unless the x-ray has been employed in the treatment of a fracture.

The safeguard for a doctor in treating a patient who will not follow directions is to tell the patient emphatically, "you follow my directions or get another doctor."

The entrusting of the counting of sponges to nurses in a well-organized hospital is in the best interest of the patient, and makes it safer for the patient, but the law holds the doctor responsible. It would seem that the law should look first to the patient's safety.

Discussion.—Judge Heaton emphasized the fact that whatever a physician holds himself to do he is held by the law to do well, and whenever he attempts to do that which he is not competent to do he is liable to a suit for malpractice.

Dr. McCaskey asked the question if a physician is called in an emergency and did the very best he could under the circumstances, and did it badly, would he be held responsible? Judge Heaton, in answering, said, "Yes, under the law, but looking at it from a humane standpoint, no judge or jury would give the doctor the worst of it."

Attorney Hoffman suggested that the lack of a proper law requiring that those desiring to practice law should come up to a certain standard may be considered as a reason for the existence of shyster lawyers. He agreed with Dr. Porter in the statement that to avoid malpractice suits the physician should be honest and should know what he is doing.

Lawyer Guy Colerick said that lawyers were often compelled to take cases which, after trial, were proved to be based on false premises, because before the trial the lawyer has no way of seeing the other side and the

trial is the only way to get at the truth. In other words, a lawyer must assume that his client's case is true until, by proper courts, it is proved true or untrue.

Dr. Buchman said that the surgeon has the whole responsibility, while the lawyer has an umpire and set of rules and laws and decisions to guide and direct him. The surgeon, on the other hand, must rely on his own judgment in many instances. While the vast majority of fractures unite kindly, yet some do not do so, and occasionally under the very best care there are failures. This is almost impossible to satisfactorily explain to a jury, which, in the majority of instances, is made up of men of not very strong mental attainments.

Lawyer Townsend said that in emergencies if you feel that you are not competent you must refuse or the law will hold you liable. Yet, from a humane standpoint it would be very hard to get a jury to inflict penalty on one who had done the very best he could do in such an emergency. On the counting of sponges the principles of law say that if the doctor feels competent to count sponges he can not delegate that work to the nurse, but must be held responsible. With reference to the liability of a company surgeon, Mr. Townsend said that it is fundamental in law that the company is not liable if they can prove that they did the right thing in securing a competent surgeon. By so doing they clear themselves.

In closing the discussion, Dr. Porter said, with reference to the counting of sponges, that he did not think that the doctor should be held responsible for the counting of sponges in a well-organized hospital, and that the patient's interests were better served by having a competent nurse look after that part of the work. He said that it was his practice to hold the nurse responsible for the counting of the sponges, and that he would continue to do so, law or no law, for he believed that in so doing he was acting in the best interests of the patient, and that was of first concern to him.

Adjourned.

J. C. WALLACE, *Sec.*

(Meeting of Feb. 4, 1908.)

Society called to order by the secretary, Dr. J. C. Wallace, with 35 members and guests present. On motion, Dr. G. W. McCaskey was called on to preside. Minutes of previous meeting read and approved.

Hydatid Mole of the Uterus.—Dr. Drayer reported a case of hydatid mole of the uterus and presented a fresh specimen. Patient, aged 42, mother of seven children, missed two periods. Bleeding began, and diagnosis of abortion at about two months was made. Uterus was packed and 1 dram of ergot administered. On subsequent visit the mass exhibited was found expelled. The cervix was found well dilated. (Hysterectomy was done one week subsequently.)

In the discussion of the case, Dr. Rosenthal said he believed it to be a hydatid mole. If it is malignant patient will not get well, even after removal of the uterus, as this is not the early stage if it is sarcoma. He believed this has to do with her pregnancy and that she will get well after curettage.

Dr. Porter says it is a syncytioma malignum. It looks like fatty tissue. The undeveloped pregnancy is shown in the body of this specimen. He advises

removal of the uterus at once, as the woman is 42 years of age. A large number of syncytioma occur in women who have been possessors of hydatid moles.

Dr. Duemling says he believes that if this is really malignant the patient's fate is sealed, and if not she will get well after curettage. He has seen three such hydatid moles, two in the same individual.

Dr. Niernan said that this condition of syncytioma is extremely malignant and is disseminated by the blood stream.

Dr. Greenwell, of Hunteertown, was elected to membership.

The regular postgraduate program was carried out and consisted of papers, talks by Dr. M. F. Porter on "Angioma and Lymphangioma;" Dr. H. G. Mertz on "Sarcoma," and Dr. J. B. McEvoy on "Carcinoma." Dr. Porter gave the varieties, structure, distribution and prognosis of simple nevus and cavernous nevus. He said that the latter should be removed, not only because they sometimes become very unsightly, but on account of the danger of their undergoing malignant changes. The best method of removal is by excision. The plexiform angioma or cirroid aneurism occur more frequently in the negro race. They are most usually found in the scalp. Lymphangioma is a multiplication and increase in the size of the lymph vessels. Lymphatic cysts are most frequently found in the neck. They also occurs in the omentum and mesentery. In the sigmoid mesocolon they have been mistaken for ovarian tumors. Chyle cysts may form anywhere in the mesentery where there are lymph vessels. They are most often found at the junction of the bowel and leaflets of mesentery. They may produce obstruction of the bowel, and Dr. Porter said that he had seen one case of chyle cyst producing volvulus, which was mistaken for a case of appendicitis, as the tumor was in that region, and the patient died. He said that in 1906 he had occasion to look up the literature on chyle cysts of the mesentery and found a record of twenty cases. He exhibited a drawing illustrating a chyle cyst of the mesentery which had occurred in his own practice.

Dr. H. G. Merz then read a paper on "Sarcoma," describing the structure, microscopic section, distribution, age and prognosis of the different varieties, and considered the general character of sarcoma, such as vascular supply, metastasis, capsule, infiltration, lymphatic supply and secondary changes.

The third paper of the evening was by Dr. J. B. McEvoy, on "Carcinoma." His discussion covered both glandular and squamous-celled cancer, and took up the question of distribution, gross and microscopic appearance, lymph and blood vessels, secondary changes and differential diagnosis.

In opening the discussion, Dr. Beall said it was a peculiar fact that hypertrophy of the subcutaneous tissue in the colored race is often well marked. One form is that of the keloid. In regard to sarcoma, he said that the ordinary mole has the microscopic appearance of sarcoma. This might explain the tendency to become malignant, the change, however, usually being carcinomatous.

Dr. Rosenthal, in discussing telangiectatic tumor, reported a case on the face of a child one and one-half years of age. The growth extends over the face and back of the ear, and is nearly as large as a man's fist, soft, pultaceous, and fluid can be expressed by pressure. Over this growth, and extending down the neck,

there are two large veins, the size of the little finger. The skin is very thin; partial atrophy well marked. He has treated two such cases by injecting them with steam and intends treating this one the same way. As a rule, in injecting steam he says you get no slough, the tissues becoming white at once and absorbing. Carcinoma are decidedly infections, hence the necessity of being very careful not to transplant or infect new ground with knives, needles, etc.

Drs. Nierman and Rhamy also discussed the papers.

In closing, Dr. Porter said that all sarcomas are connective tissue, while carcinomas are epithelial tumors. Hence the fibroid is a sarcoma in every sense except its behavior. A sarcoma is malignant because its cells have a tendency to multiply, but do not become mature. The nearer they come to maturity the less malignant is the tumor. When macroscopic and microscopic appearances of a tumor give evidence of a malignant condition of the tumor it should be removed. Tumors should always be regarded as suspicious and be removed as soon as possible.

Drs. Merz and McEvoy closed the discussion of their papers.

Adjourned.

J. C. WALLACE, *Sec.*

(Meeting of Feb. 11, 1908.)

Society met in the assembly room and was called to order by President Calvin, with 25 members and guests present. Minutes of the previous meeting read and approved. The regular postgraduate program was continued and the following papers and talks, illustrated by microscopic and macroscopic specimens, were given: "Papilloma and Adenoma," by Dr. J. D. Mercer; "Dermoid Cysts," by Dr. H. G. Nierman; "Cancer of the Uterus," by Dr. C. H. English.

Dr. Porter opened the discussion by saying, with reference to cancer of the uterus, that if we wait for the so-called symptoms of carcinoma of the uterus, we have waited too long. If a thorough physical examination is made in suspicious cases, and a microscopic examination of scrapings is made, carcinoma will be found much more often. Much better results are secured by removal per vagina than by any other method. Complete removal of the pelvic lymphatics, as mentioned by some writers, is practically an impossibility. He said that the *x-ray* had either cured a number of inoperable cases of carcinoma for him or else they have recovered in spite of the use of the *x-ray* and other treatment. With reference to prognosis, he said that carcinoma in a young individual, other things being equal, is much more unfavorable than in elderly persons. He is of the opinion that the immediate repair of the cervix is bad surgery except where hemorrhage makes it necessary. Immediate repair of the perineum is, as a rule, the correct procedure unless the tissue is so badly bruised that it is better to allow Nature to take care of the condition.

Dr. Porter said that he took exception to the expression that dermoids of the ovary are rare, if Dr. Nierman will allow that the so-called dermoids are dermoids. From a technical standpoint dermoid cysts of the ovary are the worst cysts of the ovary to remove. They not infrequently undergo malignant change.

Dr. B. Van Sweringen reported a case of dermoid in the region of the appendix, which seemed to spring

from the omentum. In taking it out it came loose from its attachment and it was impossible to find the origin of the tumor, but it was supposed that it originated from the right ovary. He reported another case of dermoid cyst of the abdominal wall, communicating with a dermoid within the belly. Operation was refused.

Dr. Beall said that to avoid the tendency to recurrence papilloma should be widely removed. A papilloma in an elderly individual should be very carefully watched. He said that it was not surprising that dermoids arise in the testicles and ovary. Some slight stimulus may stimulate the cells to form new beings.

Dr. Drayer said that he had treated a number of cases of cancer of the uterus with the *x-ray*. Some have recovered and some have not. Of those who recovered he was not sure whether they recovered because of the *x-ray* or in spite of it. He said that repair of the cervix after involution is the proper procedure. Primary repair should only be done to stop hemorrhage.

Dr. C. E. Barnett, referring to cancer of the uterus, said that the removal of the deep iliac glands is of doubtful efficacy. Wertheim, by a careful selection of operated cases, has a mortality of less than 6 per cent. This indicates that a careful selection of cases is of importance in deciding on the value of operative procedures.

Dr. Weaver said that cervical carcinoma occurs much more often in mothers than in nullipara. He considered it bad practice to curette or incise a piece of tissue for examination with the idea of performing an operation later if thought advisable. He contended that a frozen section should be made immediately while the operator and the patient are ready for immediate operation should the pathologist report malignancy.

Dr. Rhamy said that dermoids of the testicle are rare, but teratomas of the testicle are not so rare.

Resolutions concerning nostrums, recommended for adoption by the Kentucky State Medical Society, were again presented, and on motion the same were unanimously adopted.

The president appointed Drs. E. M. Van Buskirk, J. B. McEvoy and J. H. Gilpin a committee on public health and hygiene.

Adjourned.

J. C. WALLACE, *Sec.*

BLACKFORD COUNTY.

At the annual meeting of the Blackford County Medical Society the following officers were elected for the year 1908: President, C. Q. Shull, Montpelier; vice-president, Charles A. Sellers, Montpelier; secretary-treasurer, M. M. Clapper, Hartford City; delegate to the State Association, W. E. Thornton; alternate, W. A. Hollis; board of censors, Samuel Hollis, J. D. H. Lorimor and Charles A. Sellers. The society decided to adopt the postgraduate course as recommended by the American Medical Association. The society will be divided into two sections for weekly meetings; one section to meet in Montpelier each Tuesday night and the other section to meet in Hartford City on each Wednesday night. The society as a whole will meet at Montpelier on the last Friday of each month to review the work done by the sections.

M. M. CLAPPER, *Sec.*

CLAY COUNTY.

On the evening of February 20, the Clay County Medical Society entertained as guests the dental surgeons and pharmacists of the county, together with a number of visiting physicians from other counties, including Drs. Brayton, Kimberlin and Heath of Indianapolis, Dr. Cook of Bowling Green, Dr. Mercer of Reelsville and Drs. Weinstein, Luckett, M. R. Combs and C. N. Combs of Terre Haute. A very practical paper was presented by Dr. A. A. Spears of Brazil on "Care of the Teeth and its Relation to the General Health." Dr. Heath read a paper on "Eye Lesions of Diabetes," which was highly appreciated. The principal address of the evening was then delivered by Dr. Kimberlin on "Pericarditis." This proved most intensely interesting, as it was freely illustrated by more than a dozen prepared specimens showing the great variety of lesions caused by this affection.

A luncheon and smoker was provided by the local committee of arrangements and served by them in the Elks' banquet rooms adjoining the hall. During the discussion of this feature, all present became mutually better acquainted, and with felicitous speeches by Drs. Brayton, Combs, Kimberlin, Heath, Smith and District Councilor Dr. J. H. Weinstein, the later hours were most pleasantly employed. Adjourned.

G. W. FINLEY, *Sec.*

CLINTON COUNTY.

A regular meeting of the Clinton County Medical Society was held on Jan. 2, 1908. Interesting papers were presented by Dr. James W. Hadley on "The Therapeutic Value of Sulphate of Calcium," and A. G. Chittick on "The Ophthalmic-Tuberculin Reaction," with report of eleven cases. At this meeting of the society it was decided to procure the services of an attorney as common collector. The attorney is to furnish each doctor a list of the persons who do not pay their doctor bills and from whom it is impossible to make collections.

Adjourned.

A. G. CHITICK, *Acting Sec.*

ELKHART COUNTY.

The Elkhart County Medical Society met in regular session in the office of Dr. W. B. Kreider, Goshen, on February 6, with 25 members present. Dr. Kreider read an interesting paper on "The Principles and Therapeutics of Light," and referred particularly to the therapeutic use of the leucodescent lamp. The paper was well discussed. The regular meetings of the society are held on the first Thursday evening of each month.

Adjourned.

GEO. W. SPOHN, *Sec.*

HENRY COUNTY.

At a recent meeting of the Henry County Medical Society the following officers were elected to serve for one year: President, J. A. Tully, Millville; vice-president, H. E. Hiatt, New Castle; secretary-treasurer, E. K. Westhafer, New Castle. The society meets in New Castle the second Thursday of every other month, beginning with February.

Adjourned.

E. K. WESTHAFER, *Sec.*

GREENE COUNTY.

The Greene County Medical Society met at Switz City on February 13, with President Knoefel in the

chair. On account of exceedingly bad weather but few members were present. Next meeting will be held March 12, and the subject for discussion will be "Acute Mania."

Adjourned.

F. A. VANSANDT, *Sec.*

JACKSON COUNTY.

At the annual meeting of the Jackson County Medical Society the following officers were elected to serve for the year 1908: President, C. E. Gillespie, Crothersville; vice-president, L. B. Hill, Seymour; secretary-treasurer, G. H. Kamman, Seymour; board of censors, J. K. Ritter, Seymour; M. F. Gerrish, Seymour; A. May, Crothersville; delegate to the State Association, L. B. Hill, Seymour; committee on Public Health and Legislation, D. J. Cummings, Sr., Medora; M. F. Gerrish, Seymour; J. K. Ritter, Seymour. The society meets at Seymour on the first Thursday of each month at 3 o'clock p. m. The society has adopted the post-graduate course as recommended by the A. M. A., and has rented a suite of rooms over Cox's drug store, where all the paraphernalia of the society is kept.

G. H. KAMMAN, *Sec.*

JAY COUNTY.

The regular meeting of the Jay County Medical Society was held on February 14, and was the first meeting under the program of the postgraduate course of study as outlined for county societies by the A. M. A. Dr. C. E. Caylor presented the subject of tumors, viz.: "Fibroma, Lipoma, Chondroma, Osteoma, Myoma, Myxoma and Neuroma." He illustrated his paper with charts and drawings, which made it very interesting. W. D. Schwartz, of Portland, read a paper on "Benign Tumors of the Breast; Cause, Diagnosis and Treatment." There was a good attendance and much interest manifested.

Adjourned.

M. T. JAY, *Sec.*

LAKE COUNTY.

The Lake County Medical Society met in regular session at Hammond on February 6, with 15 members present. Dr. E. M. Shanklin read an excellent paper on "Tumors in and Around the Eye," which was illustrated by numerous sketches and pictures showing the various eye lesions under consideration. A general discussion followed, in which many practical points were emphasized, and in particular those points which are of particular interest to the general practitioner in his daily work.

A communication from the secretary of the state board of health was read, in which was pointed out the failure of many physicians to use proper terms in giving the causes of death when signing death certificates. Cards were distributed illustrating the various terms improperly used by physicians in signing reports.

The society unanimously adopted resolutions condemning all forms of contract practice where a limited amount of service is rendered for a fixed sum.

Dr. A. S. Schleicker, secretary of the board of health of East Chicago, explained the objects of the Chicago and Suburban Health League. It was generally recognized that a combination of the health departments of Chicago and surrounding municipalities would prove of great value to the entire district. Weekly reports of the prevailing diseases in each district are to be sent to the central office on Saturday. On Monday a

general report from the central office is to be sent to each member of the League. By this means it is hoped that the transmission of contagious diseases from one district or city to another may be prevented.

Dr. W. A. Evans, Health Commissioner for Chicago and Secretary of the League, will be asked to address the Lake County Medical Society at its March meeting.

Adjourned.

WILLIAM D. WEIS, *Sec.*

LAPORTE COUNTY.

The LaPorte County Medical Society met in regular session at LaPorte February 14. Dr. F. A. McGrew read a very interesting paper on "The Surgical Side of Gastric Ulcer," and Dr. H. W. Wilson presented a well-prepared paper on "Pneumonia." Both papers merited and received much discussion. Dr. F. T. Wilcox reported an unusual case of "Torsion of the Great Omentum, with Operation and Recovery." The next meeting of the society will be held at Michigan City on April 10.

Adjourned.

J. W. MILLIGAN, *Sec.*

LAWRENCE COUNTY.

The Lawrence County Medical Society met in regular session on Thursday, February 6. Dr. J. A. Gibbons read a well-prepared paper on "Bronchopneumonia," after which followed a lengthy and general discussion. Dr. G. W. Walls reported a case of central placenta prævia. The patient, Mrs. H., third pregnancy, at the seventh month of gestation, began to flow profusely. The hemorrhage was found to come from a placenta covering the whole outlet of the uterus. Hemorrhage soon ceased, and directions were left to call assistance immediately should it recur. Ten days later the symptoms returned. Examination showed dilatation of the cervix to the size of a half dollar. Uterine contractions absent. Consultation was called. Forced dilatation was resorted to and a quick delivery made by pushing through the placenta and doing a podalic version. Only a small amount of hemorrhage followed. Eight days later the temperature rose to 104 degrees. The uterus was thoroughly douched with an antiseptic solution, and from that time recovery was uneventful. Dr. Walls urged the necessity of adopting prompt measures for the treatment of this class of cases, and said that the pulse and respiration should be carefully watched to warn one of concealed hemorrhage.

Adjourned.

CLAUDE DOLLENS, *Sec.*

MADISON COUNTY.

At the annual meeting of the Madison County Medical Society the following officers were elected to serve for the year 1908: President, L. E. Alexander, Pendleton; vice-president, William A. Boyden, Anderson; secretary-treasurer, Benj. H. Cook, Anderson; censors, S. C. Newlin, William A. Boyden and T. O. Armfield. The society meets the fourth Tuesday of each month, except June, July, August and September. Each alternate meeting is held at Anderson, beginning with February. The other meetings are held at other towns in the county. The January meeting was held at Alexandria, the March meeting will be held at Elwood, the May meeting at Pendleton, and the November meeting at Summitville. Since the adoption of the migratory feature the interest of the society has been much better.

BENJ. H. COOK, *Sec.*

MARION COUNTY.

THE INDIANAPOLIS MEDICAL SOCIETY.

(Meeting of Jan. 28, 1908.)

The society was called to order by the president, Dr. Wynn. The minutes of the last meeting were read and approved.

The evening was taken up with a general and informal discussion of the work of the society. The discussion was concerned, chiefly, with the character of the programs and the relation of the society to matters of public health and welfare. Nearly every one was heartily in favor of the "Case Nights." It seemed to be the consensus of opinion that all case reports should be carefully written up, that more purely medical cases should be reported, that the especially interesting and valuable features of the cases should be emphasized and that a greater number of men should be urged to appear on these nights. It was also suggested that the program be not too long and so controlled as to allow more discussion of the cases reported. Drs. Brayton and Earp, as representatives of the Council, explained fully the work of the Council in making up the program, and their absolute dependence for the program on the voluntary contributions of the members of the society. It has not been the custom of this society to ask certain individuals to contribute papers except in rare instances, and the plan pursued has always seemed the best. Several of the speakers thought that work should be assigned by the Council to various individual members either as isolated papers or as symposia. Dr. Potter suggested the plan of inviting prominent medical men to address the society from time to time, and also that some collective investigation be begun in this community by committees.

In the discussion of the wider activity of the society, Dr. Clark, president of the city Board of Health, was strongly in favor of the society actively supporting all measures tending to the improvement of the public health and benevolence. He also believed that it should assist most vigorously in the prosecution of illegal practitioners and charlatans.

Among the other suggestions made were that the proceedings should be reported by a stenographer and published in detail; that those who are assigned to discuss papers should be informed as to the contents of the paper so as to allow some preparation beforehand; occasional meetings devoted to a review of the progress of the various branches of medical science; and the appointment of standing committees to carry on the broader work of the society.

Dr. Freeland made a plea for greater interest in the City Hospital. This would be of benefit to the members of the society and help greatly in pushing forward the institution to the place where it should be.

Those who took part in the discussion were Drs. A. W. Brayton, T. B. Noble, R. H. Ritter, O. G. Pfaff, E. D. Clark, G. D. Kahlo, Theodore Potter, J. V. Reed, F. C. Charlton, J. R. Eastman, Hannah Graham, S. E. Earp, Henry Ostroff, H. J. Weil, J. H. Payne, J. L. Freeland and C. F. Neu. The society adjourned.

R. H. RITTER, *Sec.*

(Meeting of Feb. 4, 1908.)

The society was called to order by the president, Dr. Wynn. The minutes of the last meeting were read and approved. The application of Dr. Charles D. Humes was read the first time and ordered posted. The program was made up entirely of case reports.

Calculus of the Ilium.—Reported by Dr. O. G. Pfaff. Patient, woman, aged 42. For the past year had occasional attacks of abdominal pain with vomiting. She was subject to spells of constipation. She was suddenly seized with a severe pain in the abdomen, followed by vomiting which became stercoraceous. Operation after about forty-eight hours disclosed a hard mass in the ilium which proved to be a calculus wholly occluding the lumen. This was removed and the patient did well for a few hours when, without any premonition, she suddenly died. This is the second case of this kind that Dr. Pfaff has seen in the past six months.

Removal of Cyst of the Ovary in the Presence of Pregnancy.—Reported by Dr. O. G. Pfaff. Patient, woman, aged 24, five months pregnant. A small tense cyst was discovered imbedded in the left cul-de-sac. Believing that this would interfere with delivery, the abdomen was opened and the cyst of the ovary removed. The patient made an uneventful recovery and went home in two weeks.

Successive Operations on One Patient for Gallstones.—Reported by Dr. O. G. Pfaff. Patient, woman, aged 45, was operated on for gallstones and a number of medium-sized stones removed. She recovered promptly but returned in a short time complaining of the same symptoms. A second operation found an encysted stone in the cystic duct and another imbedded in the hepatic duct. These, together with the entire gall bladder, were removed. Again there was a prompt recovery. Several weeks later she again returned complaining of the old symptoms. A fine probe introduced into the old tract came in contact with a hard mass. After freezing the surface a small incision was made and one stone the size of a marble was removed, as well as five or six smaller stones. The patient returned home and nothing has been heard from her since.

Intussusception in an Infant.—Dr. E. D. Clark reported the case of invagination of the bowel of an infant aged nine months. The child suddenly began to cry and persisted in this till the mother became uneasy and called in the family physician. The next morning there were frequent movements of the bowels with some blood and mucus. At this time a sausage-shaped mass could be felt and the diagnosis of intussusception was made. Operation was done two days later. Three feet of the ilium with its mesentery was found to be invaginated into the colon together with four or five inches of the colon itself. The mass was dark red but not gangrenous. The infolding was easily reduced, the bowel immediately filled with gas and it seemed unnecessary to anchor it. The little patient made an uneventful recovery. Dr. Clark discussed briefly the diagnosis and treatment of such cases.

Operation to Lengthen the Sciatic Nerve.—Dr. J. R. Eastman detailed a plastic operation for the elongation of the sciatic nerve. The patient was a girl about 15. Two years previous she had had a severe attack of typhoid, followed by a deep phlegmonous suppuration of the posterior aspects of both legs extending almost from the hips to the ankle. As a result of this local infectious process, there gradually developed marked contractures with shortening of all the flexors on the knees, and on both sides the legs were tightly flexed upon the thighs. She also became very fat. At operation both legs were straightened by elongation of the tendons implicated in the contractures. In spite of freeing the sciatic nerve and bringing great strain on

it it refused to stretch enough to allow the permanent straightening. The elongation was made by splitting the nerve for three inches, then severing by cutting the fibers upon the right side above and upon the left side below. Then the ends of the fibers of the outer half of the nerve were united to the ends of the fibers of the inner half, thus completely disarranging the axis cylinder ends, and was united to its corresponding central end. The patient was kept in plaster-of-Paris bandages for three weeks to prevent recurrence of the contraction. Later hot and cold applications and massage were employed. After three years the girl, though still obese, walks without crutches and goes up and downstairs without difficulty. Motion of the feet is almost perfect, being still slightly defective in the left. Sensation is not impaired.

Myomata.—Dr. Goethe Link reported three cases of myomatoma on which he had operated. He also exhibited the specimens which showed typically the three regions from which these tumors may develop.

Brain Hemorrhage.—Dr. Paul Coble reported the case of a man who was found unconscious and taken to the City Hospital. The next morning he regained consciousness and told that he had had a number of such attacks. Soon after he again became unconscious and died on the third day without regaining consciousness. Autopsy revealed a recent diffuse hemorrhage situated over both Rolandic areas and for some distance on both sides. The cerebellum was congested and on the under side was found a firm, dense, fibrous clot, irregular in outline, about one-half inch in diameter. The patient had told during his brief period of consciousness of frequent severe pain up and down the spine, which was probably due to the old cerebellar clot, while the present trouble was due, evidently, to the recent meningeal hemorrhage.

Inguinal Hernia.—Dr. J. H. Oliver reported the case of a man who had had an inguinal hernia for five years. One morning soon after arising his hernia suddenly descended and the tumor reached an enormous size; the mass hung down almost to the knees; reduction was impossible and the man was removed to the hospital for operation. The sac was found to contain omentum, small intestine, transverse colon and almost the entire stomach. It was necessary to puncture the stomach and remove a large quantity of fluid before the contents of the sac could be reduced. The patient seemed to recover well from the operation for a few hours when he suddenly became worse and died. On autopsy the stomach was found in its normal location, but the puncture wounds could be easily seen.

Discussion.—Dr. Stillson was much interested in Dr. Eastman's work with splicing the sciatic nerve. He has frequently resected nerves about the orbit for the relief of pain and has been struck with the difficulty in preventing the reunion of the cut ends. In one case in which he removed at least one inch of the supraorbital nerve there was permanent relief, but in many others, in which it was impossible to remove so much but still a considerable length had been removed, reunion had occurred as evidenced by the return of pain. It would seem to him that in such large nerves as the sciatic, elongation by stretching ought to be satisfactory, especially if the ends could be made to even approximately meet.

Dr. Eastman called attention to the difference between the restoration of sensation and motion after section of a nerve. The former is usually much sooner and more complete than the latter. He has seen ilius

in a child produced apparently by a calcareous mass situated in the mesentery directly opposite the site of the invagination. This was probably from an old inflamed gland.

Dr. J. W. Shiss recently saw a case in which the musculo-spiral nerve had been severed by a cut on the arm. The wound had been closed without repair of the nerve and there was complete paralysis of the distribution of this nerve. The wound was opened and the ends of the nerve exposed. The upper end imbedded in the scar tissue was in good condition but the lower end seemed to be atrophic. The ends were overlapped and sutured. In thirty-six hours the fingers could be extended and in three weeks there was almost complete restoration of function of the arm and hand. He emphasized the significance of acute intestinal obstruction in a child. It usually means intussusception.

Dr. D. F. Lee reported a case of extremely large inguinal hernia of long standing. Prolonged rest in bed, with elevation of the hips, eventually almost putting the patient in the suspended position, somewhat reduced the size of the mass. Twice operation was done. Each time some improvement was noted. The patient died of an intercurrent trouble before complete cure could be effected.

Dr. Goar confirmed Dr. Oliver's description of the contents of the hernial sac in the case reported. He had seen the patient five years previous for his hernia. At this time the gut could be reduced but the omentum could not be.

Dr. Oliver has seen restoration of function early after suturing of several nerves which had been injured several years before. In three cases when it was necessary to elongate the nerve he had split the nerve and slid down a piece to fill in the gap. In each case the restoration of function was most satisfactory. The society adjourned.

R. H. RITTER, Sec.

(Meeting of Feb. 11, 1908.)

The society was called to order by the president, Dr. Wynn. In the absence of the secretary the president called Dr. T. V. Keene to the secretary's desk.

Dr. Barnhill invited the society to attend the meeting of the western section of the American Laryngological Society to be held on February 22 in the rooms of the society.

Dr. T. V. Keene presented the following resolution regarding a contagious hospital in conjunction with the present City Hospital:

Resolved, That the Indianapolis Medical Society heartily endorses the movement inaugurated by the City Board of Health, the Commercial Club, and the staff of the City Hospital, to secure a pavilion at the City Hospital for the reception and treatment of contagious diseases other than smallpox.

Resolved, That a copy of this resolution be sent by the secretary of this society to the mayor, the president of the Common Council and the chairman of the finance committee of the Common Council.

This resolution was discussed by Drs. Freeland, Earp, Wilson and Kimberlin and then adopted. Dr. Keene then moved that the president of this society and the president of the judicial council comprise a committee to represent this society and to act with the City Board of Health, the committee on grounds and buildings of the staff of the City Hospital, and the committee from the directors of the Commercial Club in such manner as may seem best indicated to lend to the securing, for the city, of this much needed improvement to the City Hospital. This motion was carried.

The Treatment of Diabetes was the title of a paper read by Dr. Geo. D. Kahlo. The first essential in treatment is now, as it has always been, the diet. Next to this are mineral waters and general hygiene. Drugs are of least importance. An accurate diagnosis must include a careful study of metabolism based upon calorific requirements, the digestive capacity and the amount of food lost by failure in oxidation in each case. To do so requires quantitative estimation of sugar contained in twenty-four hours' urine, as also urea excreted in the same period, taking into consideration quantity, kind of food and liquids ingested and exercise taken. The object in the diet is to prevent the glycosuria and at the same time maintain a normal nutrition. To determine the carbohydrate tolerance we give a test diet containing 100 grams of bread. As soon as sugar is absent we increase bread by 50 grams each day until sugar reappears, then give a diet, the carbohydrate content of which is a little below the limit of tolerance. Potatoes or cereals may then be substituted for a part of the bread.

In reducing carbohydrates, the urine must be watched for the presence of acetone bodies, particularly oxybutyric acid, as, when this substance exists in the urine in quantity, there is danger of coma and carbohydrates must be increased. Diet lists, as ordinarily found in the text-books, are suggestive and useful, but must be modified to meet individual requirements. There is no food that is suitable in unrestricted amounts, and consideration must be given to the question of digestibility as well as to that of nutrition. Carbohydrates should be permitted in as great amount and variety as can be tolerated, and often considerable variation will be found in the ability of the patients to assimilate different forms of such food. Fruits should be allowed if possible. Meats are especially valuable, particularly those containing considerable fat. Fat foods, as olive oil, butter and cream are the most valuable of all. The essayist reported 142 cases treated at French Lick Springs, including both diabetes mellitis and glycosuria. The results were as a rule highly satisfactory. In the mild cases sugar disappeared from the urine in from three to four days without alteration in the diet. In those of medium severity a week to ten days was required to produce the same result, and in the severer forms of the disease from two to three weeks. The improvement observed was not only in the reduction or disappearance of glucose, but in an improvement in digestion and nutrition and in an increased tolerance for carbohydrates, as also an amelioration in symptoms due to complications. In addition to the effects of the water, patients under treatment at a resort have the advantage of rest, change of scene, opportunity for outdoor life, and as a rule, better facilities for the regulation of the diet. As regards prognosis, the essayist expressed the opinion that a majority of cases taken early are curable; for what is primarily a glycosuria develops into a diabetes through improper care. The disease when it appears at an early age offers little hope of recovery, and much is not to be expected in cases which are already far advanced. In those cases in which it is impossible to eliminate glycosuria entirely, life may be often prolonged to its full expectancy without discomfort or great deprivation. Alkaline mineral waters act by diminishing acidosis and by increasing tolerance for carbohydrates and the relief of complications. These results may often be obtained also by the use of bicarbonate of soda and carbonate of

calcium. The salicylates are useful in cases showing a tendency to the uric acid diathesis. Opiates may be employed in cases in which we are unable to relieve glycosuria by dietetic and hygienic measures. The best preparation is codeine, which should be administered in minimum doses to accomplish this result.

The Value of Dermal Diagnosis.—Paper by Dr. S. H. West. This study was not from any special viewpoint, but was an effort to show how all specialties are materially aided by tracing all skin manifestation to their causes and deciding if they be sequelæ or causative factors.

Discussion.—Dr. Earp: But little is known regarding the etiology or pathology of diabetes, and as a consequence the treatment is largely empirical. He reviewed the various theories regarding the causation of this disease and accepts Opie's theory of the association of diabetes and pancreatic diseases. The Islands of Langerhans are usually involved; invariably there is a lesion present although it is frequently a simple atrophy. The theory of Sajous regarding the relationship of the pituitary body and the pancreas was discussed, but the speaker did not view this theory with the same degree of acceptance that he accorded the theory of Opie. He does not believe in the Spartan interdiction of starches in the dietary as desirable in the treatment, but would be rather conservative in the matter of the withdrawal of starches wholly from the diet schedule. The vigorous exclusion from the daily diet frequently distinctly harms the patient more than the continuous ingestion of sugar. He agreed with the essayist that a quantitative estimation of the amount of sugar excreted should be made in all cases, as only by this means can an accurate estimate of the calorific value of the utilized food be made. The medical treatment did not offer much hope in the way of permanent effect, and he agrees with Hare and Sajous that arsenic in the form of Fowler's solution, and opium were of the most service. Alkaline treatment should be pushed upon the slightest symptom of coma appearing.

Dr. C. R. Sowder: The diagnosis can not with accuracy be made upon a single finding of sugar in the urine; glycosuria does not mean diabetes. One should have a patient under observation some weeks before hazarding a positive diagnosis of diabetes. It is likely that most of the cases reported in literature as having recovered have been cases of transient glycosuria and not real diabetes. A case should be under observation from one to six months before a definite diagnosis of diabetes is made. He summarized the treatment under three heads, diet, hygiene, drugs.

Dr. Kahlo and Dr. Weer closed the discussion and the society adjourned.

T. VICTOR KEENE, *Sec. pro tem.*

(Meeting of Feb. 18, 1908.)

The society was called to order in the clinical amphitheater of the City Hospital by the president, Dr. Wynn. The minutes of the last meeting were read and approved. The application for membership of Dr. D. F. Lee, accompanied by a certificate of membership in the Boone County Medical Society was read the first time and referred to the council. Dr. Wynn announced the appointment of the following members as the committee on public health, A. C. Kimberlin, H. H. Wheeler, T. V. Keene.

Arthritic Lesions.—Dr. Louis Burekhardt presented a number of illustrative cases.

Case 1.—Young woman with ordinary acute polyarticular rheumatism. This was a typical case. Incidentally attention was called to the fact that this case has been treated by passive hyperemia induced by the elastic bandage. The relief from pain was remarkable, so marked in fact that the patient asked to have the bandage reapplied when it was left off for a time. The whole condition had rapidly improved under this plan of treatment.

Case 2.—Man of about 50, with typical gouty accretions in the ears and on the hands. This man suffered from severe pains in the legs which were supposed to be rheumatic in nature, but a closer examination revealed the fact that he was suffering from flat foot.

Case 3.—Woman who had an acute attack of arthritis, supposedly rheumatism, some years ago. She now shows marked enlargements about the phalangeal articulations of both hands. There has been a hypertrophic osteitis.

Case 4.—Woman who has a persistent atrophic inflammation of the joints of both hands, most marked in the metacarpo-phalangeal articulations. There is now subluxation, rigidity and great deformity of many of these joints.

Incompetence of the Aortic Semilunar Valve.—Dr. A. C. Kimberlin presented a man with a pronounced incompetence of the aortic semilunar valve. With the Erlanger sphygmomanometer he demonstrated the various tests for determining the functional capacity of the heart. Following Schapiro's method this man showed a difference of six beats when he lay down. Herz's self-checking test by flexion and extension of the forearm gave a normal reaction in this man. Levy's method of compressing the femorals showed an increase of 22 mm. Graupnier's showed a slight fall in blood pressure after exercise. According to all these tests this man's heart showed a good functional capacity and the prognosis is good. Dr. Kimberlin exhibited a chart of the results of these tests on another case which failed to appear. In this case all these procedures showed a weakened heart in marked contrast to the results obtained in the patient presented.

Discussion.—Dr. A. E. Sterne spoke of the diagnostic value of the capillary pulse in certain heart lesions. He attached great importance to it. He believes that the instruments for the estimation of blood pressure have added much to our knowledge. The Erlanger is by far the best of all these.

Dr. R. H. Ritter spoke of the increasing interest shown in the use of mechanical means of diagnostic study. Like the microscope and stethoscope they at times give little or no information, but at other times they are of immense value and substitute accurate, scientific information for mere philosophic speculation. Too much should not be expected of these mechanical means any more than their real value should be neglected. Their actual value should be properly appreciated. Neither the blood pressure instruments nor any other will be of any service to the ignorant man.

Dr. Clark spoke of the use of braces for flat foot. A properly made brace should be strong enough to bear the full weight without breaking down, and should extend up along the inner side of the foot so as to prevent the bones from rolling in. The ready-made articles are defective for this reason and also because they do not possess sufficient strength. He thinks these braces should be made from plaster casts of the foot taken when there is no pressure on the foot. The society adjourned.

R. H. RITTER, *Sec.*

THE YOUNGER PHYSICIANS' CLUB OF INDIANAPOLIS.

The Younger Physicians' Club of Indianapolis gave its second smoker social at the Commercial Club on Saturday, Feb. 8, 1908, at 8 p. m., and if enthusiasm and smoke count for aught the organization has already demonstrated its success, and *raison d'être*. Prof. Stanley Coulter gave a short but very interesting and helpful talk on "Side Lines of Interest to a Physician," urging all to beware of ruts and maintaining that true happiness lay in a broad culture. Afterward all repaired to the assembly room above, where many things of good cheer awaited the inner man.

The Younger Physicians' Club was organized last October, and the following officers were elected: President, Dr. C. F. Neu; vice-president, Dr. P. B. Coble; secretary-treasurer, Dr. J. R. Thrasher. The purpose of this organization is purely social, and its object to bring the practicing physicians of the city in closer touch with each other. The club offers four smoker socials a year, and at such occasions all things medical and scientific are rigorously tabooed, and the doctors give themselves over strenuously to things of lighter nature. All practicing physicians of the city in good standing are eligible to membership. Drs. Gabe, Garrett and Wales were appointed by the president, Dr. Neu, to serve on entertainment committee and provide for the next smoker social to be given some time in May. J. R. THRASHER, Sec.

ORANGE COUNTY.

At the annual meeting of the Orange County Medical Society the following officers were elected for 1908: President, R. E. Baker, Orleans; vice-president, W. W. Sloan, French Lick; secretary-treasurer, J. I. Maris, Paoli; censors, C. H. Stewart, Orleans; C. E. Boys, West Baden; L. Lindley, Paoli. The society meets every other month throughout the year. Adjourned. J. I. MARIS, Sec.

OWEN COUNTY.

A regular meeting of the Owen County Medical Society was held on Jan. 9, 1908, at which time the following officers were elected to serve for one year: President, C. H. White, Cataract; vice-president, Ralph R. Coble, Spencer; secretary-treasurer, Allen Pierson, Spencer. The society holds regular meetings the third Friday of each month in the Public Library in Spencer. Adjourned. ALLEN PIERSON, Sec.

PUTNAM COUNTY.

The meeting of the Putnam County Medical Society was held Thursday, February 25, in the City Library at Greencastle, and was well attended, not only by the regular members of the profession, but also by members of the faculty and students of the university. Dr. Ford, chief surgeon of the Big Four railroad, was to speak first at 10:30, but did not arrive at that hour, and Dr. Myers, at the head of the medical department of the State University, delivered an able lecture on "The Anatomy of the Brain." He brought with him the finest anatomical specimens of that organ ever exhibited to a Greencastle meeting of physicians. He began by exhibiting and describing the membranes of the brain; then taking up the subdivisions in their minutiae, locating and showing all the ventricles,

cranial nerves, and sulci of the brain substance; locating also, as far as known, all the sensations of sight, hearing, tasting and smelling. His lecture was exceedingly interesting. Dr. Ford lectured at 1:30 on "The Divisions of the Brain." The interest in medical matters was greatly increased by the visit of these able men. Adjourned. J. V. BASTIN, Sec.

STEBEN COUNTY.

The Stenben County Medical Society held a regular meeting on January 10. The subject for discussion was "Tuberculosis," and a very interesting and instructive meeting resulted. The members of the society expressed themselves as well pleased with THE JOURNAL, and wish to extend encouragement and best wishes. Adjourned. MARY RITER, Sec.

SWITZERLAND COUNTY.

At the annual meeting of the Switzerland County Medical Society, held Jan. 2, 1908, the following officers were elected to serve for one year: President, Scott Culbertson, Vevay; vice-president, J. H. Smith, Vevay; secretary-treasurer, John H. Shaddy, Vevay. The society meets on the second Friday of each month. Adjourned. J. H. SHADDY, Sec.

UNION COUNTY.

The annual meeting of the Union County Medical Society was held at Liberty on December 4, and the following officers were elected to serve for one year: President, E. R. Beard, Liberty; secretary-treasurer, E. P. Weist, Liberty; censors, F. T. Dubois, Liberty; M. F. Vereker, Kitchel; and J. E. Morris, Liberty; delegate, Garrett Pigman, Liberty. E. P. WEIST, Sec.

VIGO COUNTY.

The Vigo County Medical Society held its annual banquet Jan. 7, 1908, at which time the following officers were installed: President, B. V. Caffee, Terre Haute; vice-president, R. H. Leavitt, Terre Haute; secretary-treasurer, C. N. Combs, Terre Haute; delegate, M. R. Combs, Terre Haute; board of censors, O. R. Spigler, Terre Haute; J. R. Yung, Terre Haute, and C. S. Carmichael, Sceelyville.

The regular meeting of February 18 was of exceptional interest, the subject being "Pneumonia." The lectures were by Drs. Kutch, McConnell and Layman. Slides showing the different stages of the disease and a pure culture of the pneumococcus were shown by the lantern. The entire fresh lungs of a man dying during the early part of an attack of lobar pneumonia were exhibited, and also a dissection of a fetus showing the embryonic pulmonary structures.

A public meeting was held on February 18, with the city council, school board, city officials, principals of the schools and faculty of the state normal, to consider the question of Medical Inspection of Schools. Dr. E. D. Clark, president of the Indianapolis City Board of Health, read an able paper on the subject, which was discussed by Dr. J. J. Kyle of the faculty of the Indiana Medical College, and Dr. Eugene Buehler, Indianapolis City Sanitarian. Dr. J. N. Hurty, secretary State Board of Health, followed with a practical illustration. He had been in Terre Haute all day and inspected a certain school, one of the worst in the city, and the statement of the conditions

he found and the diseases he noted in certain pupils was a most convincing plea for the establishment of medical inspection in Terre Haute.

C. N. COOMBS, *Sec.*

WABASH COUNTY.

The regular meeting of the Wabash County Medical Society was held at the County Hospital in Wabash on Wednesday, February 19. The treatment of puerperal fever was the title of a paper presented by F. S. Kilson of North Manchester, which proved very interesting and brought out an extended discussion. In addition to the paper a clinic was held by Dr. L. W. Smith at which an operation for appendicitis was performed. The president of the hospital, Miss McDougal, served dinner to the members and invited guests.

J. E. JEWETT, *Sec.*

WARRICK COUNTY.

At the annual meeting of the Warrick County Medical Society the following officers were elected to serve for one year: President, J. G. Hoover, Boonville; vice-president, Thomas Wright, Boonville; secretary-treasurer, Dalton Wilson, Yankeetown; delegate to the state association, W. A. Hewins, Chandler; censors, W. H. Mills, Boonville; N. M. Spradley, Tennyson; E. L. Youngblood, Boonville. Three new members have recently been taken into the society, namely: J. T. Samples, Boonville; William Walden, Newburg; Walter P. Robinson, Boonville. The society meets the second Tuesday in each month at Boonville.

Adjourned.

DALTON WILSON, *Sec.*

The Warrick County Medical Society at the meeting of Tuesday, January 14, adopted the constitution and by-laws recommended by the state association and the American Medical Association and has applied for a charter. The officers are: President, Dr. J. G. Hoover, Boonville; secretary, Dr. Dalton Wilson, Yankeetown. The society has twenty-four members.

TWELFTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The Twelfth Councilor District Medical Society will meet at Fort Wayne, Tuesday, April 7, 1908. This society has established a reputation for a high class of practical scientific work and those who attend the next meeting may look forward to a program of unusual excellence. Dr. James Nevins Hyde and Dr. J. Clarence Webster, both of Chicago, will be the guests of honor and present addresses. There will be a morning session devoted to clinics, and afternoon and evening sessions devoted to papers and addresses.

BOOK REVIEWS

THE SEXUAL INSTINCT. By James Foster Scott, B.A., M.D., C.M. Second edition, revised and enlarged. New York: E. B. Treat & Company, 1908. Pp. 473. Price, \$2.00.

This is an excellent little treatise on a subject of vital importance to both layman and physician. In this second edition two new chapters have been added and a useful index has replaced the table of contents of the first edition, a thing that always adds to the value of a work that can be used for reference.

The conscientious physician can not peruse this little volume without feeling an increased responsibility

in his vocation, any more than the fair-minded layman can fail to find in it a faithful portrayal of the evils consequent upon the tritely expressed "early sowing of wild oats." One of the strongest points the author emphasizes is the fallacy of the "double standard" of morals which is so commonly accepted by the world at large. Likewise the history of the various attempts at the regulation of prostitution are reviewed, and the inconsistency and failure of such proven. It is greatly to be hoped that such productions as this will help along the one possible way of combating the "great black plague" by educating the public in sexual matters and venereal prophylaxis.

INTERNATIONAL CLINICS. Vol. 4, Seventeenth Series, 1907. Pp. 308. Profusely Illustrated. Philadelphia and London: J. B. Lippincott Company.

This volume of a well recognized high grade quarterly seems unusually rich in material of interest to both the general practitioner and to him who limits his practice. The general subjects considered in this number are: Treatment, medicine, surgery, gynecology, genitourinary diseases, orthopedics, neurology and otology. One of the most interesting contributions under the head of treatment is that of Warthin's on the "Comparative value of Roentgen irradiation and the administration of arsenic in the treatment of leukemia." Under medicine Calmette presents his results and technic of the opthmo-reaction to tuberculin as a diagnostic measure in human tuberculosis, which reaction, if ultimately proven trustworthy, will be a great boon to the diagnostician as well as the patient who must submit to it. A beautifully illustrated radiographie study of gastroptosis is offered by Pancoast. In surgery Greene presents a second part to his study of surgical syphilis. In the other departments as well, so much of value appears that the whole volume is well worth careful perusal throughout. Indeed it is difficult to do justice, in a short review, or even to mention in the most cursory manner, the meritorious things that are to be found herein.

THE PRINCIPLES AND PRACTICE OF MODERN OTOTOLOGY.

By John F. Barnhill, M.D., Professor of Otology Laryngology and Rhinology, Indiana University School of Medicine, and Ernest de W. Wales, B.S., M.D., Associate Professor of Otology, Laryngology and Rhinology, Indiana University School of Medicine. Octavo of 575 pages, with 305 original illustrations, many in colors. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.50 net. Half morocco, \$7.00 net.

In the preface of this work the authors state that among others the following objects have been kept in view: 1. To modernize the subject; 2. To correct certain traditional beliefs; 3. To advocate the earliest possible prophylaxis or treatment; 4. To emphasize the importance of a thorough examination and a definite diagnosis as a basis for rational treatment; and, 5. To thoroughly illustrate the text. They have succeeded admirably in accomplishing their purpose. The methods of practice in otology have changed rapidly during the last few years, and this becomes emphasized by reading the authors' detailed and complete description of the more modern and latest accepted methods of practice as followed by leading otologists in this and other countries. Of particular interest and importance are the recommendations and description of various operative treatment for the relief or cure of aural pathological conditions, and here the latest and

most approved information is given. One of the striking features of the book is the wealth of beautiful and accurate illustrations which elucidate the text. There are also a few instructive chapters on subjects directly associated with the practice of otology, but not usually found in works of this character. Considered as a whole, the work reflects great credit upon the authors and is deserving of its descriptive title.

DISEASES OF THE NOSE AND THROAT. By D. Braden Kyle, M.D., Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia. Fourth Edition Thoroughly Revised and Enlarged. Octavo volume of 725 pages, with 215 illustrations, 28 in colors. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$4.00 net. Half morocco, \$5.50 net.

One can not critically examine this work without being impressed with the fact that the author has covered the subject of diseases of the nose and throat in a very practical, thorough and comprehensive manner. The diseases are classified according to the pathological alterations caused by them, and each chapter is complete in itself, so that the reader on turning to a certain subject may find under that heading the matter desired. A particularly commendable feature is the taking up of each subject from a general standpoint and the consideration under diagnosis, pathology and treatment of all systemic conditions in their relation to the special diseases of the throat and nose. Much attention has been given to the etiology and pathology of the various diseases so that by such detailed description the treatment is indicated and easily directed. In considering the subject of treatment definite doses or strengths of solutions to be used have been given, and operations or other procedures minutely described. Considerable space has been devoted to certain diseases which are somewhat rare, and this materially adds to the value of the book. The popularity of the work is attested by the demand for four editions within a few years. This last, or fourth edition, has been entirely and thoroughly revised. A large number of new articles have been added and many additions and alterations have been made in the other chapters in order to bring the work thoroughly up-to-date. The work is excellent in every particular, and will continue to meet with approval from students, general practitioners and specialists.

SURGERY: ITS PRINCIPLES AND PRACTICE. In five volumes. By 66 eminent surgeons. Edited by W. W. Keen, M.D., LL.D., Hon. F.R.C.S., Eng. and Edin., Volume 3. Octavo of 1132 pages, with 562 text-illustrations and 10 colored plates. Philadelphia and London: W. B. Saunders Company, 1908. Per volume: Cloth, \$7.00 net; half morocco, \$8.00 net.

In this volume is treated the surgery of the head by Harvey Cushing; the surgery of the neck, by E. Wyllys Andrews; the surgery of the thyroid gland, by A. Kocher; the surgery of the larynx and trachea, by George Emerson Brewer; the surgery of the thorax, by the same author; the surgery of the breast, by John M. T. Finney; the surgery of the mouth, teeth and jaws, by Edmund Owen; the surgery of the tongue, by John Chalmers Da Costa; technic of abdominal surgery, by John C. Munro; surgery of the abdominal wall, and surgery of the peritoneum and retroperitoneal space, by the same author; the surgery of the esophagus, by Georg Gottstein; surgery of the stomach, by

A. W. Mayo Robson; surgery of the liver, the gall-bladder and biliary ducts, by William J. and Charles H. Mayo; surgery of the pancreas and the surgery of the spleen, by B. G. A. Moynihan.

Cushing divides his subject, the head, into four parts—the scalp, the cranium, the meninges and the brain. Each subject is treated in a very practical and thorough manner. He makes a plea, very properly, for more neurologic study by those who would practice neurologic surgery. One or more quotations, medical and otherwise, precede each part of this chapter and add to the literary entertainment afforded the reader.

Perhaps the most interesting part of the chapter on the surgery of the neck by Andrews is that devoted to "operations," and especially that portion devoted to Crile's operation, which is tersely described and thoroughly illustrated.

The chapter on diseases of the thyroid gland could have been written by no one better able to perform the task than Albert Kocher; hence it follows as a matter of course that this chapter is classic in character. The danger of excision of goiters is so slight (3 in 1,000 in Kocher's hands) that surgical treatment is advised in all goiters with nodules that are degenerating, diffuse colloidal goiters which do not respond promptly to iodine, goiters producing either pressure or cardiac symptoms, abnormally situated goiters and rapidly growing or sensitive goiters. Excision is the operation of choice. It is to be regretted that the author does not give the bibliography of his subject as do all the other writers in this volume.

The chapter on the nose and accessory sinuses is disappointing. Nasal deformities is disposed of in four pages, of which one and a half are given to paraffin injections. The propriety of treating such subjects as rhinorrhea, tuberculosis of the pharynx, acute superficial tonsillitis and follicular tonsillitis in a work of this character is questionable. The tonsillotomy is advised for the removal of enlarged tonsils, and no mention is made of complete removal by dissecting them out.

In the chapter on surgery of the larynx there is introduced quite a little matter that is purely medical. We are told by the author that intubation and tracheotomy yield about the same results in diphtheria of the larynx. This is a mistake. The percentage of recoveries is much larger in intubation than in tracheotomy. Local antiseptics used in the way of sprays, gargles and local applications as advised by the author probably do more harm than good, especially in children. Barring the above exceptions this chapter is satisfactory. The surgery of the thorax is by the same author and treats of the injuries, diseases and malformations of the chest walls and contents. Sauerbruch's cabinet is described and its advantages named.

The surgery of the breast is very properly allotted a chapter of its own which is sufficiently comprehensive, is written in a very clear and entertaining style, and in addition to other illustrations contains three beautiful plates.

The mouth, teeth and jaws are treated in one chapter, and the tongue in another, and by different authors. Just why this was done is not apparent. More space is given to a consideration of the surgery of the tongue than to that of the mouth, teeth and jaws combined, which apportionment seems not in accord with the relative importance of the subjects. The consid-

eration of dental caries and pyorrhea might better be left to works on dental surgery.

The technic of abdominal surgery, surgery of the abdominal wall, and surgery of the peritoneum and retroperitoneal space are the subjects of the next three chapters, respectively, and are written by John C. Munro. Because they are so terse, so comprehensive and evince such true conservatism and sound surgical judgment, these chapters deserve special commendation.

The surgery of the esophagus is a very complete presentation of this rather unsatisfactory chapter in surgery.

One naturally expects much of a chapter on surgery of the stomach by Mayo Robson, and it is but fair to say that his expectations are fully met in this chapter.

The chapter on the surgery of the liver, gall bladder, and bile ducts is written by the Mayos. The chapter is divided in two parts; the first is devoted to the liver, and the second to the bile ducts and gall bladder. Both parts are introduced by a concise statement of the embryology, anatomy and physiology of the structures. A better exposition of the subjects in the space allotted can scarcely be conceived. Among the complications arising from gall-stones we fail to find any mention of obstruction of the bowel from large stones. The two closing chapters are by Moynihan, of Leeds, England, and deal with the pancreas and spleen, respectively. A very valuable part of the chapter on the pancreas is the description of the technic of examination of the urine and feces in suspected cases of pancreatic disease. Splenectomy offers the only hope of cure in Banti's disease. The operation should be done before serious changes have occurred in the liver or bone marrow. The danger of the operation *per se* is slight. The bibliography of each subject is given at the end of the chapter in which it is treated, with the exception of that of goiter. The illustrations are many and good. This volume is a fitting companion for its worthy predecessors.

ABSTRACTS FROM CURRENT MEDICAL LITERATURE

THE MEDICINES THE PHYSICIANS SHOULD PRESCRIBE.

Among the many very interesting subjects discussed in an admirable address delivered before the Kentucky State Medical Association by Dr. George H. Simmons, secretary of the American Medical Association, reference was made to the work being done by the Council on Pharmacy and Chemistry as the most important of all the good things with which the American Medical Association is to be credited. Concerning this work, Dr. Simmons says:

"1. The council investigates such proprietary medicines as the manufacturers offer for investigation. If, on investigation, the council believes the preparations are what they are claimed to be, and if they comply with the rules, they are accepted. A full description of these preparations is published in *The Journal A. M. A.*, and afterward incorporated in a book, 'New and Non-Official Remedies,' for easy reference.

"2. For obvious reasons, the council can not take up a preparation for investigation and inclusion in this book unless the manufacturers are willing, and submit it for the purpose.

"3. This work is primarily in the interest of manu-

facturers of proprietaries. The majority of them are opposing it—especially is this true of those who put out typical nostrums—and consequently they will not submit their preparations. Even many of the legitimate pharmaceutical houses are secretly opposing this work, and will continue to do so unless they find it good policy to do otherwise.

"4. The work is directly in the interest of physicians and indirectly of the public. Naturally, therefore, if physicians do not co-operate with and support the council, manufacturers will not. If physicians do support it, the viewpoint of the manufacturers will change.

"5. There is one effective way by which physicians can co-operate and change the viewpoint of the manufacturer, and that is by refusing to use any proprietary medicine that is not to be found in the approved list.

"And this is the appeal that I want to make to every member of the medical profession of Kentucky. Give this movement your support by refusing to recognize as worthy of your consideration any proprietary medicine that has not been investigated and approved. And in making this appeal I want to assure you that it will not require any sacrifice on your part, nor will your patients suffer. If one in five of the physicians of the United States will do what I am asking you to do, the greatest evil that rests on American medicine will be removed—the curse of the nostrum and the blight of commercialized therapeutics.

"It is a simple thing to ask and is easily done. The book, which contains a full description of the recognized articles, can be had for the asking, and a list without descriptions costs but a postage stamp. Do not forget that this propaganda is affecting one of the most profitable enterprises of the day, one from which millions of dollars profits are drawn annually; that linked with it, and a part of it, is the 'patent medicine' business, and that these are combined in the opposition."—*Abs. Kentucky Medical Journal*.

THE ORGANIZED MEDICAL PROFESSION AND POLITICAL DUTY.

Politics and medicine meet on common grounds within the limits of state medicine and public hygiene. Disraeli said "the first duty of the statesman is the public health." This truth applies also to the organized profession. The co-operation of political and medical organizations in this common field of action would result in the realization of the grand possibilities of sanitary science for the public good. The ultimate object of both medicine and politics is the public welfare. Their co-operation for the public health defense is the measure of mutual obligations. This ideal can be attained only after establishing right relations between medicine and politics. Although they seem foreign to each other, the failure of each to meet its obligation to the public welfare is the real cause of their estrangement.

An awakened public conscience is demanding a conscientious performance of duty. On analysis of the situation, the public has learned that health interests have not been protected in accord with the advance of sanitary science. Public officials do not properly estimate the value and importance of sanitary administration. The people know that this subject is neglected, from congress to the town council; they realize now, as never before, that political authority runs to partisanship rather than to public health affairs, that sanitary organization is too often a part of the political machinery.

The people also realize the fact that the medical profession is derelict in public duty. Activity on the part of the laity resulting in the passage of the pure food law, and the detailing of the "Great American Fraud" by the popular press, were required to teach the profession its defenseless disregard of the public health.

The fight against that pandemic disease, tuberculosis, by organized effort is being conducted almost single-handed by the laity. Sanitary officials, as the expressions of partisan politics and an indifferent medical profession, do not aid the public, as their name would indicate, not even in their capacity to make official records, for the reason that physicians refuse to co-operate. Public health authority should be the joint expression of good politics and good physicians.

The medical profession has been too much absorbed in scientific work to engage in public health affairs or to "meddle in politics." Besides, the dignity of professional men, as a rule, keeps them out of politics. There is a feeling of repugnance toward any movement that offers to inject politics into medicine. The fear is that medical organization will be used for partisan purposes. Certainly this will never happen, medical organization will never be used as a political machine in the interest of any party.

The question is not how much politics may be injected into medicine, but how much medicine should be injected into politics, as exemplified by the Bureau of Legislation of the American Medical Association. Viewed in this light there is no excuse for the pseudo dignity of physicians that inhibits their performance of public duty. To secure the co-operation of political parties and government officials for the public health would add to the dignity and usefulness of the profession. This public service is needed to keep the profession in tune with an altruistic age. It is needed in every community. This necessity threads its way into every avenue of life, penetrates public office and institutions, municipal and state government. The public health service naturally in the keeping of the medical profession has much to do. Our army sanitation, a national disgrace, and the necessity of a federal health commission languish, like hungry dogs, at the door of congress. Typhoid fever runs epidemic from water taps in thousands of homes, because of the sanitary misrule of the civic authorities. Tuberculosis and other communicable and preventable diseases continue their ravages upon health and life for the lack of official and medical co-operation. There is need of medical service improvement in nearly all public institutions.

The public service of the medical profession is further needed to correct the evils of proprietary medicine and the fraud of charlatans. This service is needed to protect medical interests and standards from the incursions of quacks and cult-bound healers. It is needed to place health boards upon a sanitary basis and to maintain the medical practice act.

Self protection is the object of many other associations, and if for no other reason medical men should give more attention to medical economics.—*Ohio State Medical Journal*.

THE ELIMINATION OF DEGENERATES.

Degeneracy is a defect which differs from disease in that it can not be cured. It is an incurable defect and means there is something lacking in the mental or nervous makeup. Degenerates are increasing faster than the increase of the general population. All the

states are continually finding it necessary to erect new institutions for the care of the degenerate, the delinquent and the dependent. The class known as degenerates includes most of the insane, the idiotic, the epileptic, the confirmed inebriates, the imbecile, the sexual perverts, the prostitutes, the tramps, the criminals and the habitual paupers.

Education does not and can not eliminate degenerates. There is but one way, and that is to prevent their being created. The duration of the lives of the insane, of criminals, of idiots, of epileptics and habitual paupers has been increased about eight years in Indiana in the last two decades. The average duration of life in the same period for the whole population has increased only four and one-half years. The perfect care given the defective class is the cause of the increased duration of life. This increase is a disadvantage to the degenerates as well as to society in general. But sentiment demands that the care be given, and it is well for the sane and the strong that this sentiment exists. It is the good animal that makes a success of life. It takes good animals to make a nation strong and persistent. Only good human animals are wanted.

The restricting of propagation must be adopted. This is necessary to preserve the nation and even the race under the present conditions of civilization. These truths have led Indiana to adopt scientific and practical methods for eliminating the unfit. The law affecting the problem from the marriage side was passed in 1905. "No license to marry shall be issued except upon written and verified application. The form of application shall be supplied by the state board of health and said board may revise said forms from time to time as may be advisable. No license to marry shall be issued when either of the contracting parties is an imbecile, epileptic, of unsound mind, or under guardianship as a person of unsound mind, nor to any male person who is or has been within five years an inmate of any county asylum or home for indigent persons, nor shall any license issue when either of the contracting parties is afflicted with a transmissible disease." The marriage is illegal without a license, and a penalty of \$100 fine lies against any county clerk for issuing a license contrary to law, and the same penalty lies against any person authorized to marry who does so when the applicants have no license.

Strongly enforced, this law, without doubt, will reduce degeneracy in some degree, but will not very greatly affect the evil. The second law aiming at the prevention of the creation of degenerates passed at the last session of the Indiana legislature, permits castration, but vasectomy is the operation usually performed. It is simple, without the slightest danger, does not mutilate, and may be performed in three minutes without local or general anesthetic. Since October, 1899, Dr. H. C. Sharp, surgeon of the Indiana Reformatory at Jeffersonville, has operated upon 300 cases, and up to the going into effect of the law most of the men sterilized by vasectomy submitted voluntarily to the operation. Dr. Sharp says: "I have never seen any unfavorable symptoms. There is no atrophy, no cystic degeneration, and no disturbed mental or nervous condition following vasectomy. On the contrary, the patient becomes of a more sunny disposition, brighter of intellect, ceases bad practices, and advises his fellows to submit to the operation for their own comfort and good."—Dr. J. N. Hurty, Secy. Indiana State Board of Health. *Abs. Illinois Medical Journal*, January, 1908.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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ISSUED MONTHLY under Direction of the Council

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VOLUME I.

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NUMBER 4

ORIGINAL ARTICLES

SPONGES LEFT IN THE ABDOMEN.

AN UNUSUAL CASE WHICH THROWS A NEW LIGHT
ON THE SUBJECT.

MILES F. PORTER, A.M., M.D.

Surgeon to Hope Hospital; Professor of Surgery in the
Indiana Medical College, the School of Medicine of
Purdue University.

FORT WAYNE, IND.

Mrs. N., referred by Dr. Fisher, of Markle, Ind., was admitted to Hope Hospital, Feb. 22, 1908. Family history good. Menses came at 10 years, regular. Was married eight years ago and has one child. Had measles two years ago. Three years ago had hematuria for a time, which cleared up and she has had no trouble of this kind since. Has had attacks of pain and tenderness in right side of belly for two years. At first these attacks were accompanied by fever, but not lately. Has had constant pain for the past two months, during which time she has been able to get out of the house but twice. Bowels regular.

Examination.—Dark complexion, well nourished, hazel eyes. Hyperesthesia of skin and tenderness to pressure over quite a large area of the abdomen, the center of which area is at McBurney's point. Bimanual examination reveals a small tender mass in right ovarian region and tenderness in left, but no tumor.

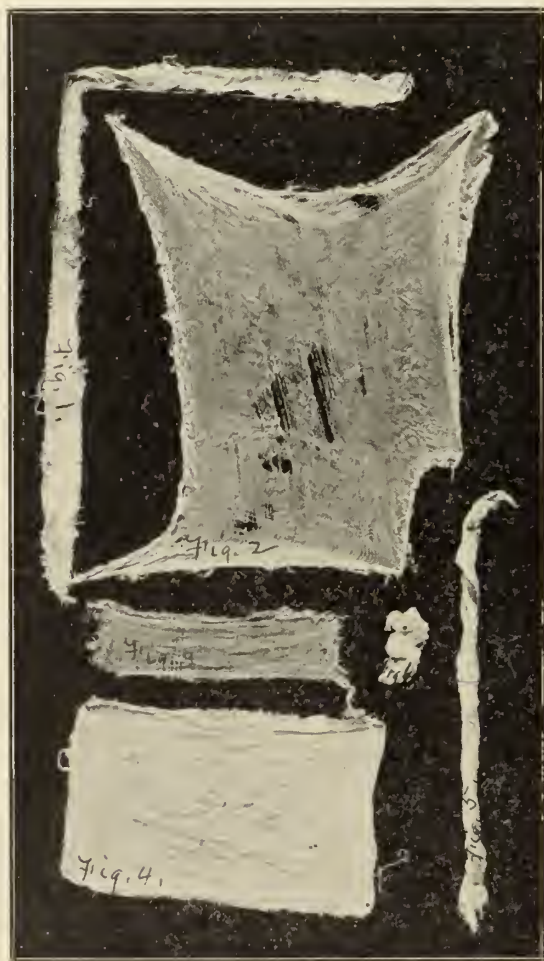
Diagnosis.—Chronic appendicitis with salpingitis duplex.

Operation.—Midline incision. Right small parovarian cyst, double hydrosalpinx and obliterating appendicitis were found. The cyst was excised and both tubes and appendix removed. The subsequent record shows a perfectly normal recovery. The patient left the hospital March 15, 1908 (twenty-two days after the operation).

feeling well. Eight days after she left the hospital I got a telephone from Dr. Fisher saying that he had removed several pieces of gauze from her vagina. On inquiry from him, I learned that the pieces did not tear off but came away, or rather were removed with forceps, in the shape of rolls about the length and size of a lead pencil (Fig. 5), and after all presenting were removed others would present in a few hours, requiring that he visit her three or four times a day to take them away. The doctor thought that the pieces came from the pelvic cavity through "an opening in the right side of the vagina about the size of a lead pencil."

On the next day but one after learning of the matter I visited the patient at her home with her doctor, found the patient on a cot apparently suffering some pain, which she said was due to more pieces "coming down." She did not look sick. In reply to my question, she said she felt well until she got a jolt on the ear on her way home, and that since then she had been having pain, which was worse at times, and had not been so severe since the pieces began to come away. The first knowledge the doctor had of the nature of the trouble came through the patient's husband, who told the doctor that there was a piece of gauze protruding from the vagina. I asked to see what had been removed and was shown a large number of pieces of different texture, whereupon I remarked that the goods was not such as I used as sponges, that there were more pieces than had been used all told in the operation, and that consequently they had not been left in the woman's belly by me. It was averred that they could get into her belly only through the wound made by me and at the time it was made, because it had been closed, healed by first intention, and was still closed. The patient facetiously remarked

that she "supposed she swallowed 'em." "No," I replied, "had you swallowed them they would not come out through the vagina." Dr. F. now asked the patient if she thought more "pieces were down," and being answered in the affirmative, he introduced a speculum and found that she was right. I removed the speculum and introducing my finger I came upon a small wad of something which upon removal proved to be a piece of ordinary white muslin about three inches wide by seven inches long, twisted into a rope



(Fig. 5), doubled upon itself so as to make a small irregular ball or wad (Fig. 6). It was perfectly clean and was so saturated with what looked and smelled like urine that on squeezing between the fingers several drops were squeezed out. I examined the vagina with my finger, assuring myself that there were no more "pieces" there, that there was no hole leading into the pelvic cavity, and that in fact it was a perfectly healthy vagina and in no wise unusual except its

cleanliness, for which, of course, the frequent wipings it received were accountable. In the presence of the patient, her mother-in-law and the doctor I said, pointing my finger at the patient: "Doctor, I don't know where those rags come from, but that woman knows—well, and could tell if she would." The mother-in-law objected to my statement rather forcibly, but the patient said nothing. I then took the doctor outside, told him that the woman was a malingerer, and that we would give her a chance to put some more rags in for removal. We recovered one more piece before we left. Before leaving I insisted upon both the doctor and myself making a thorough inspection of the vagina with the eye and the finger as well. This was done, but no abnormality was found. It should be stated that some of the "pieces" were tinged with blood, but none of those removed during my visit were so tinged. I brought ten specimens with me, from some of which the accompanying illustrations were made. The figures are about half the actual size. Figures 1, 2, 3 and 4 show the texture of four different kinds of goods found. I did not look to find more kinds and can not say positively that the ones represented are a complete exhibit of the variety in the stock. Eight days after my visit Dr. Fisher reported "no more exhibits." So far as I know, no threat was made of a suit for damages, nor did the patient or her mother seem out of humor with me. The husband was at his work and not present during my visit, although he presumably knew the day before that I was to be there, as I had sent word that I was going.

The woman is a malingerer, of course, but the interesting query arises as to her object. Without discussing the subject I will mention the possible explanations that occur to me.

1. Desire for money.
2. Desire for sympathy.
3. Desire to avoid work.
4. Sexual perversity.

During the patient's stay in the hospital nothing pointing to a neurotic condition was noted. Indeed, she was regarded as an unusually nice and agreeable patient. The case is placed on record because, so far as I know, it is unique, and for the further reason that it throws, what is to me, a new light on the subject of foreign bodies left in the belly at operations.

TREATMENT OF ACNE VULGARIS.

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Acne vulgaris is the most prevalent of skin diseases. The predisposing cause is youth; 80 per cent. of the cases begin before the sixteenth year. With puberty comes hair on the parts before hairless, and the sebaceous glands of the face and back—survivals of a period when the whole body was hairy—experience in an abortive manner the impulse to growth given by the ripening of the ovaries and seminal glands, the development of the breasts, and the entire pilo-sebaceous system.

Acne is common in young men, who usually pay little attention to it. It is a source of annoyance and mortification to young women, the greatest impediment to their sexual allurements, crippling them in their natural desires to appear well in society and to achieve their natural functions as women—to have a home and a husband and their normal position in social life. This disease may be cured, or at least controlled, during this storm and stress period of girlhood, when they are

“Standing with reluctant feet

Where the brook and river meet,”

and, therefore, every doctor should be as familiar with acne and its treatment as with that of eczema or syphilis. Cure or control the acne of a young girl or woman, and you will secure the gratitude of herself, her family and her friends.

The young man or girl comes to the office with a nose, chin and forehead which feel greasy; the face is studded with comedones and blackheads; there may be white or red papules, and these intermingled with large, pustular and dull red, deep, indurated nodules. The same conditions may be on the back, chest and tops of the shoulders, the skin of the chest and back greasy as observed by sight and touch. This is acne in a severe form; it may be very slight; it may be that the whole face is red, swollen and looking as if the skin would slough.

The patients, if women, and particularly unmarried women, are gloomy; they seek retirement; they go veiled; they are kept from social, business and educational opportunities and privileges; they suffer from introspection; they are housebound; they may become the victims of melancholy and insanity. To cure them, or to alleviate the disease so there will be no extensive pitting or disfigurement, is as great a necessity and victory as to arrest a beginning tuberculosis, or cure a syphilis or gonorrheal urethritis.

We may accept the varying views of Unna, of Sabouraud, or of Gilchrist, as to the parasitic origin of acne, but this is not so important in practice as to begin an empirical treatment at once. Treatment should begin with the first acne papules and pustules on the face of the schoolboy or girl, thus preventing scarring and pitting and shutting the youth out of the joys and opportunities of the golden years from puberty to the close of adolescence.

The condition of the skin must be improved, as with eczema, so that it will be resistant to invasions. Eczema is a catarrh of the skin due to malnutrition. The keynote of success is proper feeding and exercise, combined with elimination of toxins. The constitutional treatment for acne is not very diverse from that for eczema. Build up the skin, empty the follicles of their grease and pus and the invading bacilli. Keep the skin aseptic, so there may be no extension. Use freely the curette, the lancet and the comedo expressor to empty the follicles. Improve the regimen. Closing a long paper on the treatment of acne, Dr. George Henry Fox, of New York, says: “If I were asked to give the treatment of acne in the fewest possible words I would simply recommend a strict diet, cold morning sponge baths, systematic exercise, massage of the parts, the frequent use of the curette, and the application of antiseptic lotions.”

And now as to the details of the above treatment, hygienic, dietary, medicinal and local.

First, the hygiene. Daily cold or tepid baths on arising, with brisk towel friction of the entire skin; once a week a warm soap and water bath before retiring; a half hour's walk morning and evening for the sedentary and housebound; well-ventilated bedrooms and eight hours of sleep; deep breathing; horseback riding; golfing, skating, housework and dancing are all good forms of exercise.

Second, as to diet. Do not give too strict rules. Stimulating foods, highly-spiced: beer, spirits, tea and coffee should be avoided. They are bad in excess and lead to overeating. A cup of coffee for breakfast, water for dinner, and a cup of tea for supper, may be permitted. Elimination may be secured by a quarter of a grain of calomel at night and a heaping teaspoonful of light calcined magnesia in the morning before breakfast in a glass of water. The water alone, with a teaspoonful of salt, may do for many. Discard fresh breads and cakes. Pastry and fried foods are obnoxious, and too much sugar and candy should be avoided. Eat slowly, chew the food well, take little or no water at meals. Milk, if good, taken between meals or at bedtime if out

late, or if hungry, is esteemed by Dr. L. D. Bulkley of New York, and was advocated by the late Dr. Joseph Eastman of Indianapolis. Milk is an excellent diet in eczema and the erythemas, and notably in pruritis, because of the large amount of its calcium content, thus alkalinizing the blood, shortening the time of coagulation and preventing leakage into the skin.

Water may be taken an hour or two after meals. The bowels should be made to move at the same time each day. This is a matter of habit and can be secured by effort. The writer sympathizes with Dr. Edwin Walker's views that purgatives are the frequent cause of constipation, but he also believes in the night dose of calomel, for selected cases, as it is laxative, diuretic, a glandular stimulant and given in decreasing doses from one-quarter grain to one-eighth or one-tenth at night, with the magnesia mixture or the glass of warm water on rising, will secure a regular morning habit of moving the bowels, and so oppose auto-intoxication.

The old "Startin's solution," the "Mistura ferri acidi" serves a good purpose in plethoric girls with costiveness, a coated tongue and much local hyperemia of the face, the hands and feet. It is as follows: Sulphate of magnesia, one ounce; sulphate of iron, ten grains; common salt, thirty grains; dilute sulphuric acid, two drams; infusion of gentian, enough to make four ounces.

The dose is a large tablespoonful in a glass of water one-half hour before breakfast, and at night if needed. This is a valuable laxative, diuretic, iron tonic and stomacheic stimulant. It was a great favorite of the older school of practitioners in Indianapolis—Drs. T. B. Harvey, J. R. Eastman, R. N. Todd, L. H. Dunning, among scores of others—really the old "Dorsey's solution," which radiated from the old Ohio Medical College after its great value in the dysentery of pioneer days was recognized by Dr. Dorsey of Cincinnati. Arsenic, from 1/40 to 1/20 grain three times a day, is often beneficial, because of its specific effect upon the skin.

Third and last, the local treatment. And here we can not go far astray for the path of the dermatologist has been liberally sprinkled by the White Lotion, the *Lolio Alba* of dear old Dr. Duhring of Philadelphia for the last forty years, and made so dazzling white that no doctor who reads any modern skin book can fail to find it. In nine out of ten books on the skin this lotion is deservedly given the leading place. I quote Dr. Hardaway of St. Louis, who has just brought out the most practical and generally useful work on Cutaneous Therapeutics yet published. "Chief

among the local remedies for acne stands sulphur, and perhaps the most generally useful method of its application is in the form of the *lotio alba*." To make this invaluable lotion, use a good article of liver sulphur—yellow, hard and malodorous lumps, from well-sealed tin cans. It costs 35 cents a pound, and a pound with a pound of sulphate of zinc will make eight quarts of the lotion.

The usual prescription is one dram each of the potassium sulphide and sulphate of zinc, dissolved in four ounces of rose water. The best way to make it is to dissolve an ounce of the potassium sulphide in one-half pint of water, and an ounce of sulphate of zinc in another half-pint; then pour them together in an open basin and stir well until you have a thick, creamy, pure white mixture. Put in a quart bottle and dispense to patients in four or six-ounce bottles, and *show* them how to dab it on the face, back, etc., with a bit of cloth, best once or even twice thoroughly at night, so that the face is well whitened. It will fleek off in the morning and may then be reapplied lightly. This lotion may be used as weak as from twenty grains of each of the salts in four ounces of water up to the consistency of a thin paste. It is invaluable for common acne, and also for acne rosacea, for pustular eczema, ecthyma—in brief, for all pustular conditions of the skin; it also prevents boils and cures scabies.

Rose water is not essential in making this lotion; any clean water, hard or soft, hot or cold, will do. Ten drops of glycerin may be added to each ounce to soften the harshness. A dram of white sulphur may also be shaken up with each four or six ounces. An excess of sulphate of zinc makes it too astringent and peels the face, but this frequently does good. An excess of the sulphide makes the lotion alkaline and soft to the feel. It must always be shaken, so that the precipitate of sulphur, of potassium sulphate, and the white pulverulent and hydrated zinc sulphide thrown down will be well mixed with the water. Ladies will often come back to get the lotion for a cosmetic. If the face is harsh, scaly or peeled, reduce the strength by adding water, or substitute for the day an ounce of cold cream, to which is added a dram of sulphur—really the most desirable sulphur ointment, excellent according to Jackson, used once a week for dandruff of the scalp, especially if strengthened with thirty grains of salicylic acid to the ounce of the sulphur ointment.

The third step in the treatment by sulphur is the use of a good, well-scented boro-talcum powder to which is added one-fourth of its bulk of

white sulphur. These are shaken together in a box and used to whiten the face on going to school or in society. It covers the acne redness where present and continues the sulphur treatment, which summed up is as follows:

(1) Wash the face well at night with cold or tepid water and good soap; tincture of green soap is desirable. Open with a sharp lance all pustules, scrape off all acne tops, use the comedone expressor, dry the face and whiten with the white lotion. (2) In the morning flick off the white powder with a soft towel. It is not then necessary to wash the face. Use the ointment of sulphur in the morning if the skin feels dry and harsh in spots or places. Or apply the lotion lightly if about the house. (3) On going out use the powder as a cosmetic and at night wash the face and begin the treatment again.

The patients should see the physician at the office twice a week until under way with the treatment. The surgical work—opening the deep pustules, curetting the shallow ones, expressing the comedones, etc.—should be done by the physician himself, but some patients become expert in the work. The use of the white lotion with correction of diet, attention to hygiene, and such remedies as are indicated, will be enough for most patients.

For some cases the Kummerfeld sulphur lotion is excellent and sufficient. It is essentially a handful, half an ounce, of white sulphur, shaken in eight ounces of lime water, or, more elaborately: white sulphur, half an ounce; pulverized camphor, fifteen grains; glycerin, one dram; lime water and rose water, three ounces of each. Mix, shake well, apply night and morning. This lotion does not show on the face; it may be used often and is very efficient.

With the above treatment, varied as systemic conditions may require, the disease can be controlled and almost universally cured. This we have proved by a long and satisfactory experience. The treatment is simple, not expensive, and accessible to thousands of patients scattered over the country whose faces would otherwise be pitted and scarred by neglect of these simple toilet measures, for such in practice they are.

Much has been hoped for in rebellious cases of acne by the use of bacterial injections, the dosage and spacing of the doses being regulated by the frequent estimation of the opsonic index. Stock vaccines are uncertain in this treatment; the autogenous vaccines are preferable. This treatment means that the patient must go to a place where this most delicate method is thoroughly understood and constantly practiced. The expense is great; the laboratories are as yet but

few and the results are not at all positive. In the summary of his notable paper on the treatment by opsonic methods of boils, sycosis vulgaris, acne, pustular dermatitis and septic ulcers, Dr. Whitfield, professor of dermatology in King's College, London, in a paper read before the Sixth International Dermatological Congress in New York last September, said: "In acne the treatment is uncertain, in some cases being most brilliant and in others without the slightest avail." The same uncertainty was expressed by Professor Jay F. Schamberg, of the University of Pennsylvania, and by Dr. Von Eberts, of Montreal, in papers read on the same subject before the congress. These three notable papers on the treatment of the suppurative diseases of the skin after the method of Wright, emanating from London, Philadelphia and Montreal, respectively, are of the highest value to the physician and surgeon; they may be read in the December, 1907, issue of the *Journal of Cutaneous Diseases*.

The hygienic, dietetic and local treatments which have been detailed in this paper may be combined with the opsonic method and also with the x-ray treatment in those few cases of acne which are not cured or alleviated after a reasonable period.

The x-ray treatment is often efficient and is regarded as the best single treatment of acne by various writers, among them Pusey of Chicago and Hardaway of St. Louis. But these same authors all admit that the older forms of treatment are too valuable to be abandoned, and that some cases of acne are incurable by the rays alone. Other authors and practitioners of long experience before and since the x-ray therapy was introduced, only resort to the x-rays in a few extreme cases. Among those who have been very guarded as to the use of the ray treatment are Drs. L. D. Bulkley, George T. Jackson and George Henry Fox of New York, and also Dr. F. B. Wynn of Indianapolis, who has used the ray treatment in perhaps a larger range of diseases than any other of our local practitioners.

The dangers are manifold; atrophy, telangiectasis, permanent erythemas, permanent loss of hair, and even incurable burns. The number of these accidents with the rays decreases with the perfect technic and experience of the operators.

The x-ray acts in various ways: leucocytosis is increased; the lymph supply is made greater about the lesions, thus increasing the local opsonic index. But these excellent results are also secured by dietetic, hygienic and medicinal measures, and also by Bier's method of passive hyperemia. Originally applied to tuberculous arthri-

tis, this method is now employed in a wide range of diseases, as has been especially exemplified before our local and state societies by Dr. Louis Burekhardt of Indianapolis in numerous essays and discussions. Moschowitz has successfully applied the method to paronychia, cellulitis and more recently to acne. Small cupping glasses with rubber bulbs are applied for one or two minutes at brief intervals through the space of an hour, in daily sittings, with improvement apparent in from two to five days. The same method has long been used by Stelwagon in emptying the small pus areas which complicate severe acne. It is becoming a common treatment for boils, carbuncles and large abscesses, such as those of the breast. Cupping glasses with an inch-wide mouth and rubber suction ball may be used for the acne lesions.

In the good effects upon the tissues mentioned the ray treatment and the passive hyperemia treatment have much in common. The bactericidal effect of the rays lies in their power to increase the local opsonic index just as it is increased by the old treatments—the soil is made obnoxious to the seed. But the rays also bring about a vascular constriction and produce atrophy of the sebaceous glands in which all acne begins. The uncertainty of currents, the variance of tubes, the personal idiosyncrasy of the patient, the factors of knowledge gained by experience on the part of the operators, must all be given weight, and these collectively make it impossible to state in any given case what the result, beneficial or harmful, of ray treatment may be. The legal rule is now established by precedent that if the ray operator possesses and exercises the average knowledge of the treatment he is not responsible for the injuries that may occur. The patient should always be warned of the dangers of the ray treatment. This warning is not only cautionary but is morally and legally obligatory upon those operators who use the ray treatment upon minors, because of the danger of producing sterility, temporary or even permanent, in young men and women, an accident that has not infrequently happened to the ray operators themselves and to their patients, both male and female.

But not one case of acne in a hundred can be treated with x-rays; and as the great majority of adolescents have acne which should be relieved, the ordinary medicinal, hygienic, dietary and local treatments which have served so long and so certainly should not be ignored or neglected.

Not infrequently physicians have brought their daughters to me for advice as to an acne which had already pitted the cheeks but which yielded promptly to a rational hygienic, dietetic,

internal and local treatment such as is indicated above. Had it been commenced as soon as the first eruptions of acne occurred the pitting and searing might have been avoided and the pleasures and possibilities of girlhood and womanhood increased.

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PLASTIC OPERATION FOR ELONGATION OF THE SCIATIC NERVE.

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The observations of Waller, made in 1850, in effect that both peripheral and central degeneration occur after division of a motor nerve, are, after many years of dispute, in the main acceptable. At present it is clear that complete peripheral degeneration occurs and that centripetal atrophy extends over several nodes of Ranvier. Division of a sensory nerve is followed by changes essentially the same. After division of a sensory nerve peripherally to the spinal ganglion, degeneration begins which eventually extends throughout the whole nerve and includes the end organs. If cut between the cord and the ganglion, centripetal degeneration extends into the cord (Keen).

In traumatic degeneration the cut ends of the medullary tubes swell, and the neurilemma cells are changed into an homogeneous, deeply-staining mass. The axis cylinders become thickened and marked by beadlike masses and the myelin droplets described by Nasse exude.

Later the medullary sheath breaks up into small particles. The axis cylinder undergoes fragmentation of its fibers and the staining reactions are lost.

In regeneration after division the nuclei of the peripheral neurilemma cells enlarge with proportionate increase of chromatin, evidence of active proliferation. Leucocytes remove the debris of the degenerated axis cylinders.

These phenomena have been observed constantly. However, whether these proliferating neurilemma cells of the peripheral portion of a divided nerve actually re-establish the degenerated axis cylinders is doubtful. Many authors have said that all new axis cylinders must grow out from the central end from a central ganglion cell or from an undegenerated fiber extending from the central end of an axis cylinder. This means that such a new bridging fiber must occasionally grow for more than fifty centimeters to reach its end organ.

Ballance believes that, after division, peripheral axis cylinders are regenerated in sections,

different segments of the neurilemma distal to the cut forming new short nerve fibers which eventually join ends, forming a continuous axis cylinder. There is, therefore, still a question as to whether all regeneration is from the central cut end.

At any rate, it is certain that within a few days after division fine fibrils grow out from the central end of the axis cylinder, penetrating the substance of Schwann and entering the surrounding granulation tissue. If the peripheral end is not too far away, these fibers bridge the defect. If protected and guided by an enclosing tube of decalcified bone or formalinized artery, such outgrowing fibers will, as is well known, traverse a distance of several centimeters. It is suspected that an attraction like that of chemotaxis draws the bridging fibers to the peripheral end.

Gotch and Harrison,¹ believers in the central outgrowth theory of regeneration of divided nerves, observed that after division and suture of the sciatic nerve in the rabbit, sensation reflexes appeared first in the peripheral portion nearest the point of suture, and at later periods at more distant points in the peripheral end as if the new axis cylinder were slowly growing from the central end along the track of the peripheral portion.

The length of time elapsing before return of motor response varied directly according to the proximity of the site of division and suture of the supplied muscles.

Robert Kennedy,² upon the other hand, remarks that "from the clinical point of view there is a well-established observation which the central view of regeneration of nerves can not explain. This is the early return of sensation after secondary suture of divided nerves. When the divided nerve has remained ununited for, say, a period of three months, and when the area of skin supplied by that nerve has remained completely devoid of sensation, then after-suture sensation returns in the insensitive area in a day or two. The sensation which is found restored is of an ordinary kind. Thus, the pricking of the skin with a needle causes acutely painful impressions."

Kennedy states that "Ranvier's central outgrowth view can not explain such rapid restoration, for, in the first place, unnaturally rapid growth of the new fibers from the central end would be required, as no sensation could be felt till the axis cylinders had reached the end-organ. In the second place, there would be a difference of time in the reappearance of sensation, accordingly as the section of the nerve was near or far

removed from the end-organs, which there is not. As regards suture of a nerve immediately after section, sensation takes much longer to appear, and this is what one would expect, as time is required for regeneration of the new nerve fibers in the distal segment. Where suture is performed at a time remote from accident, the distal segment has already had time to form its new nerve fibers. The only difficulty is to explain the very early passage of impulses across the plane of suture, but this, in Kennedy's opinion, is probably brought about by the junction of neurilemma cells, newly produced from both the central and peripheral ends, the gap being thus bridged and the impulses apparently having the power to pass along the protoplasm of such cells."

"The reason why motion recovers later than sensation is owing to the fact of the rapid degeneration of the muscles after nerve section, which degeneration must be repaired by the nervous impulses reaching them through the restored nerve."

The last statement of Kennedy is not easily understood unless we assume that degeneration of muscle begins instantly and proceeds with lightning rapidity after division of a motor nerve.

It is remarkable, in view of Kennedy's explanation, that in cases of immediate suture, the motor response is always tardy. The circumstance of constant tardy motor response after immediate suture is more plausibly explained by assuming that some time is required to re-establish continuous and complete working neurones after the inevitable destruction, a more definite readjustment being essential for the transmission of co-ordinate muscular movements than for the carrying of mere tactile sensation.

From observation made in the past few years, Kennedy is of the opinion that the muscular tissue never disappears entirely although separated from the nerve centers, and this is important from the surgical point of view, as operation may be undertaken with prospects of success although the muscles have been paralyzed for very long periods.²

The position at present occupied by Mott, Halliburton, Edmunds, Cajal, Langley and Anderson³ is the one which most investigators are taking. They believe that the axis cylinder has an exclusively central origin. They have observed the neurilemma proliferation in the peripheral segment of the cut nerve, but think that this activity is for the purpose of building "scaffolding" for the guidance, support and nutrition of new outgrowing nerve fibers, and are unable to

1. Liverpool Medico-Chirurgical Journal, 1906.
2. Murphy's Year Book, 1907.

3. British Medical Journal, Sept. 29, 1906.

accept the view of the antagonists of the old Wallerian statement—that the peripheral neurilemma can produce new axis cylinders. If we could fairly assume that whereas new centrally developed axis cylinders are essential for motor response, sensation may be passed along the neurilemma of a cut-off peripheral segment, the chapter would be clear.

Peeresse collected sixty-two cases of division of the great sciatic nerve, and there are twelve reported cases of suture of the ends. These reports show great disparity in the time of restoration of sensation. For example, in the case of Bossuet, the ends were sutured five days after the accident, and after almost a year there was still great disturbance of sensation. The anterior half of the dorsum of the foot showed distinct anesthesia and the whole of the calf was marked by deep hyperesthesia. In a case of Lannelongue, sensation returned after six hours. In a case of Roswell Park, it returned after thirteen days.

In so much as the technic was practically the same in all cases, it seems strange that Bossuet's patient noticed no sensation whatever for three months. Murphy says the disparity in these reports tends to discredit them.

The case which the writer wishes to report herewith is unique so far as can be determined, as in this case the sciatic nerve was split and elongated by three inches, whereas the twelve reported cases of suture of the sciatic represent end-to-end apposition of divided ends simply.

Miss B., aged 15, had passed through a severe attack of typhoid fever some two years prior to her admission to the service of the writer. During the process of the typhoid infection there developed a deep phlegmon along the posterior aspects of both lower extremities, extending almost from the hip to the ankle, attended by all the local signs of active phlegmonous inflammation, followed by suppuration as well as profound constitutional depression. As a result of this local infective process, there gradually developed marked contractures with shortening of all of the flexors of the knees and on both sides the legs were tightly flexed upon the thighs.

As the girl convalesced from the acute infection she began to take on flesh until at the time of her admission, notwithstanding she was barely 15 and not tall for her age, she weighed more than 180 pounds. She was, therefore, very obese.

The right leg was straightened by elongation of the tendons implicated in the contracture. It was possible thus to straighten the right limb. Upon the left side, after all of the tendons had been elongated, it was seen that the sciatic nerve still resisted extension of the leg, maintaining

the limb in the position produced by the contracture.

The sciatic nerve was, therefore, freed from its point of branching to a point four inches distant from the hip joint and traction brought to bear upon it, approximately up to the limit of eighty pounds, but without the desired result.

It is known to be unsafe to stretch the sciatic nerve more than one-twentieth of its length.

Perineuritis and super-implanted scar tissue had so impaired its elasticity that it seemed quite impossible to elongate the nerve trunk sufficiently by stretching.

There are, as is well known, several other methods of elongating nerves. For example, by grafting in a section of nerve from a freshly-killed rabbit, dog or other animal or one removed from a recently amputated limb. The nerve may be cut and the ends connected "par distance" by numerous strands of catgut, which serve as guides for the growth of new axis cylinders. Such strands should be enclosed within a tube of decalcified bone or Cargyle's membrane, which also should surround the nerve for a short distance above and below. This insulation prevents interference by granulation tissue.

Other intermediary substances have been used, but these all serve as conductors of axis cylinders. In addition to these methods, the nerve may, in suitable cases, be elongated by flaps cut from the central and peripheral ends, turned toward each other and united as in tendon suture.

In the case here reported the elongation was made by splitting the sciatic nerve for three inches, then severing by cutting the fibers upon the right side above and the left side below. In other words, cutting out from the median slit at each end in opposite directions. Thus the ends of the fibers of the outer half of the nerve were united to the fibers of the inner half, completely disarranging the axis cylinders and breaking neurons so that no peripheral axis cylinder end was by any chance united to its corresponding central portion. In so much, however, as it has been quite clearly proven that there can be no complete restoration of motor function until the axis cylinders are newly developed from central cut end-to-end organ, it is clear that the method employed is not open to serious criticism as might be carelessly imagined. It is true that the limited experience which surgeons have had in nerve suturing has indicated that the uniting of the ends after the method of tendon suture or transplantation of nerves gives results in no wise better than nor different from those secured by the simple suture "par distance;" that is, simple long distance suture with catgut or silk, the

parity varying with more or less accuracy according to the distance between the site of division and suture and the muscles supplied, which distance, in the writer's case, was great.

The fact that motion returns so late in this case where the nerve was sutured immediately after division is in support of the central outgrowth and neurilemma scaffolding doctrine. At the time of suture no time had been allowed for peripheral neurilemma scaffold building and the muscles had undergone distinct atrophy from non-use during the long convalescence.

In the suture of nerves it is always wise to use a flat Hagedorn needle with a dull end like the Kousnietzoff liver needle so that the axis cylinders are not pierced by the needle but simply pushed aside, the needle passing between them, and in order that scar tissue may not interpose itself between the ends. Cargyle's membrane or other protective should envelop the nerve ends. These precautions were used.

After the operation the legs were dressed in plaster-of-Paris bandages for three weeks to prevent recurrence of the contractures, after which massage, hot and cold douches and electricity were employed.

The operation was made on Dec. 8, 1905. At present, notwithstanding the girl is still extremely obese and of slight musculature, she walks without crutches and ascends and descends stairs without difficulty. She extends and flexes the right foot perfectly, but the left foot only slightly; that is, through an arch of less than an inch at the tip of the great toe. She can flex the toes of the right foot, but not those of the left. She can adduct the right foot, but adduction is impossible in the left foot. She can stand upon the right foot alone, but not on the left alone. Neither foot hangs down; that is, there is no drop foot. Neither toe catches as she walks, but the left toe shuffles slightly. Movement in the arch of the right foot is normal, but the girl can not bend and straighten the arch of the left foot. There is no flattening of the arch upon either side.

Sensation is not impaired on the sole of either foot. In fact, it is quite normal all over the foot and lower leg; that is, she is quite conscious when the left foot and leg are touched and can determine with considerable precision the character of the instrument employed. She flexes both knees almost normally.

It is barely possible that had the union been made "par distance," using catgut suture conductors enclosed in a decalcified bone tube, the outgrowing axis cylinders might have found the site of their end organs more readily. It is possible that with more time there will be a better result as to motor restoration, for it is perfectly clear to everyone who has had any experience whatever in nerve suturing that return of sensation may be expected to precede motor restoration by months in practically every case, the dis-

ing to the distance between the site of division and suture and the muscles supplied, which distance, in the writer's case, was great.

The fact that motion returns so late in this case where the nerve was sutured immediately after division is in support of the central outgrowth and neurilemma scaffolding doctrine. At the time of suture no time had been allowed for peripheral neurilemma scaffold building and the muscles had undergone distinct atrophy from non-use during the long convalescence.

WHAT THEY SAY ABOUT US

The Fort Wayne *Medical Journal-Magazine* has been merged into THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, the first number of which appeared January 15.

If one may judge from a single copy, the new journal will bring credit to the medical profession of Indiana and to its editors.—*New England Medical Gazette*.

It is a very great pleasure to welcome the appearance of THE JOURNAL of the Indiana State Medical Association.

This journal made its debut the first of the current year, and in two numbers which have thus far appeared it bids fair to take a prominent place among the best of the state journals. Experience has proven their value and those states which have been hanging back are now rapidly falling into line. Ohio in this, as in other matters, has demonstrated its progressiveness, and our *Journal*, now in its fourth volume, extends its congratulations and best wishes to our sister state.—*Ohio State Medical Journal*.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION is the title of the new Indiana state journal, published by Dr. Albert E. Bulson, Jr., of Fort Wayne, Ind. THE INDIANA JOURNAL is but slightly smaller in page than this journal, printed on tinted, calendered paper, and is very neat and attractive in its typography and general appearance. The first two volumes have started off with a list of very excellent original papers, the first number with a fine lithograph illustration. The editorial columns prove that the editor has been wisely selected. We are glad to note that the advertising pages are free from the objectionable advertising still carried by a number of our state journals. The inestimable value of a state medical publication has been thoroughly demonstrated in Texas, and we extend to the new State journal our hearty congratulations and best wishes.—*Texas State Journal of Medicine*.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 219 W. Wayne St., Fort Wayne, Ind.

APRIL 15, 1908

EDITORIALS

MEDICAL COLLEGES MERGED.

The medical profession of Indiana will rejoice in the knowledge that the medical college merger is now an accomplished fact. The following is the account of the matter as given by the Fort Wayne *Journal-Gazette* of April 6:

"INDIANAPOLIS, April 5.—President Bryan of the Indiana University and President Stone of Purdue University met here to-day and brought about a consolidation of the Medical School of Indiana and the State College of Physicians, ending a war of rivalry of about two years' duration. The new school will be under the direction of Indiana University. The Medical College of Indiana is known as the Purdue School of Medicine, and the state college is affiliated with Indiana University.

"In this merger both schools made concessions. A complete course in medicine—embracing four years—will be maintained in Indianapolis. Also there will be a two years' course at Bloomington. The first two years may be taken either in Bloomington or Indianapolis. It was upon this point that the break came between Indiana University and the Medical School of Indiana two years ago when an attempt was made to bring the medical school under the wing of Indiana University.

"The text of the statement signed and given to the public to-night by President Bryan and President Stone follows:

"The efforts of Indiana University and Purdue University to promote medical education in this state through co-operation with the members of the profession and with existing proprietary medical schools have been undertaken in good faith and with the one aim of establishing this important branch of professional training upon a sound educational basis. Indiana University has sought for many years to establish and develop such a department, in which efforts it has encountered many obstacles, but has made continuous progress.

"Purdue University entered this field only when convinced that service could be rendered to the profession and to the state by the tender of its offices in consolidating existing courses and

aiding in the evolution of a single strong medical school at Indianapolis under the auspices of the state and with the co-operation of other educational interests, a task which was undertaken only after it seemed that other efforts in this direction had failed.

"Out of these efforts by the two institutions had grown an unfortunate controversy which operated to confuse the situation and becloud, in the minds of the public, the true relations of the universities. In the belief that the present conditions are delaying the educational progress and interfering with the highest functions of the two universities, the logical conclusion follows that the two medical schools now in operation in Indianapolis under the direction of the two universities should be united in one school and that this should be under the exclusive control of one or other of these universities.

"The trustees of the two universities have thus mutually agreed to the following conditions, to which the faculties of their respective medical schools assent, namely:

"To a union of the two medical schools under the direction of the Indiana University.

"To a selection of the faculty of the new school with due regard to the members of the present faculties.

"And to the maintenance of a complete medical course in Indianapolis as well as the two-year course in medicine at Bloomington.

"Only in this way does it seem feasible to accomplish the ultimate purpose of developing for the state a sound system of medical education, which has been the aim of both parties in their efforts in the field as well as to promote the harmonious and friendly relations so essential to the proper discharge of the functions of both universities.

"It is hoped, therefore, that the citizens of the state, whether remotely or intimately interested in this question, will accept the above decision as evidence of the disinterested motives of these institutions, and their desire to serve the state with undiminished energies.

"W. L. BRYAN,

"President Indiana University.

"W. E. STONE,

"President Purdue University."

"The final plans and details of the consolidation have not been worked out yet, but the officials say the change will be made as soon as possible. It has not been decided which of the college buildings the school will occupy in Indianapolis or what its name shall be. Neither is it known what arrangements will be made for the transfer of students, but it was said to-day that

the students would all be assured of full credit for work done in either school."

There is no one, whether he be a member of the medical profession or a layman, but will be in hearty sympathy with this union on this broad basis, provided he has at heart the best interests of education in Indiana. The details of the organization remain to be accomplished. This will take time. We should not grow impatient. We want a medical school in Indiana that will stand well, in comparison with the best, and the making of a school of this kind will require time, energy, thought and money. Council with those who have had experience in similar work will be needed. Some individual interests may suffer, but this must be borne if the best interests of education require it. We feel that the corner stone of a great medical school has been laid, and in order that the superstructure when completed shall compel the admiration of all, the profession and the people of Indiana should unite in helping Dr. Bryan in the completion of the great work.

Speaking on the subject of medicine and the university at the convocation exercises of the University of Chicago last December, Dr. William H. Welch of Johns Hopkins University said:

"The public is vitally interested in the supply of good physicians, never so much as to-day when their power to serve the welfare of the community has been so vastly increased and is rapidly growing, and if it wants good doctors it must help to make them.

"I have been able, within the limits of this address, to indicate only a relatively small part of the increased strength gained by both medical school and university by the combination of their forces, but I hope that I may have conveyed some impression of the rich fields of discovery, of the beneficent service to the community, of the important educational work opened to the university by close union with a strong department of medicine, and of the inestimable value to medicine of intimate contact with the fructifying influences and vitalizing ideals of the university."

All honor to Dr. Stone, to Dr. Bryan and to the many others whose labors have made it possible for Indiana to have a strong medical school, an integral department of a university.

MILES F. PORTER.

MEDICAL ORGANIZATION IN INDIANA.

We are pleased to announce that the Council, at a recent meeting, has entered into an agreement with the American Medical Association by which systematic co-operative organization work

will be taken up in Indiana. The plan, which was fully explained in the January number of *THE JOURNAL* when commenting upon the work in Illinois, is as follows:

The Membership Department of the American Medical Association has selected the best and most competent men from among its representatives for organization work. These men have had much experience along this line and are thoroughly familiar with all the details of organization work. The work is taken up by counties and councilor districts. Before an organizer is sent into a district, correct proof of the names of the physicians of each county, indicating the members and non-members of the county medical society, is sent to the county secretary, who is asked to revise it and return it to the general office of the American Medical Association. This is done for two reasons: first, that the membership list for that county may be complete and up to date; second, to enable the secretary to designate on the proof those physicians in the county who are not members of their county society, but who are eligible and who would be acceptable to the county society. From this returned proof a list of eligible and desirable non-members is made up, which list is given to the organizer when he starts into the district. At the same time he is given a letter of introduction to the councilor, on whom he calls before taking up the work in the district, and with whom he carefully discusses the work in that particular district. The councilor gives him such advice and instructions as he thinks best, and also gives him a letter of introduction to each county secretary in the district. The organizer then takes up each county in turn, calling first on the county secretary and presenting his credentials. The organizer and the county secretary then go over the list of non-members of the county in detail, the secretary giving the organizer such advice in the way of suggestions regarding local conditions, individuals, etc., as he may think advisable. The organizer then calls personally on each desirable non-member in the county, presenting the cause of medical organization and endeavoring to secure the application of the physician for the county society. Applications are taken on a triplicate blank, one copy of which is turned in to the county secretary, the second is sent to the state secretary, and the third to the general secretary of the American Medical Association. The organizer, at the time of taking the application, collects one year's dues for the county society, which, of course, includes the state society per capita assessment. As soon as the county is completed the organizer reports to the secretary of the county society as to the re-

sults obtained. When an entire district is completed a report is made to the councilor of the district. In this way it is anticipated that within the next few months every physician in Indiana who is a non-member of his county society can be personally interviewed and wherever possible induced to become a member of his county and state organizations.

The advantages of this kind of organization are many, and as there is room for extended organization work in Indiana it is hoped that the officers of county societies will give every possible aid and assistance to the organizers sent into this state. There is no reason why at least 500 or 600 new members for the state association can not be secured during the next few months. As a matter of interest, we may say that the American Medical Association does not take up this systematic organization work in any state where there is no journal published by the state association. It has been conclusively proven that the organization work is carried on more effectually and with far better results in those states where association journals can assist in the work. It is, therefore, expected that *THE JOURNAL* will be of particular service in producing results in Indiana.

PUERPERAL SEPSIS.

Recently the attention of the State Board of Health was directed by a layman to a fatal case of puerperal sepsis which, from the history and circumstances, could be pretty definitely traced to the obstetrician as the carrier of infection. Briefly, the facts are these: The physician was caring for a case of septicemia a few hours previous to the time he was called to attend the labor case. Forty-eight hours after a normal delivery the puerpura suffered a chill, followed by fever and sepsis, which proved fatal in nine days. It is questionable if the physician even used the ordinary precautions in sterilizing his hands.

While it must be admitted that even the most careful obstetricians do occasionally lose a case by sepsis, yet that is not an excuse for so flagrant an abuse of our present-day conception of the practice of obstetrics as this would seem to be. In the first place, there are doctors enough nowadays so that it seldom becomes a real necessity for a physician to attend a woman in confinement if he is engaged in caring for an acute infectious disease at the same time, and the most conscientious man will not do it. Next, if the emergency does arise where it is impossible to secure the services of some other doctor, then the physician owes it first to the patient, next her family, and

finally to himself to take every possible precaution for the prevention of carrying the infection: just as rigid precautions as though he had been visiting a smallpox patient. Then his asepsis about his patient who is about to be confined should be just as perfect as that of the surgeon who is preparing to open a belly, for there is just as much risk for the parturient woman as there is for the patient who is being subjected to a major surgical operation.

Like tuberculosis, so with puerperal sepsis, the most effective treatment is the prophylactic one. Nature's own remedy. Hence our plain duty lies in the adoption of every possible measure to avoid carrying infection up the vaginal tract which has been naturally protected by its acid-forming flora. That the vast majority of cases of puerperal infection are produced by vaginal examinations has been proven repeatedly. Semmelweis, in 1846, was the first to demonstrate this fact when he reduced the percentage of deaths due to puerperal sepsis in the maternity department of the Vienna General Hospital from 11.4 to 1.27 per cent. simply by compelling all students fresh from the postmortem table to wash their hands in chlorin water before making vaginal examinations. To-day the best statistics from the large maternity services come from those that eliminate the vaginal examination in so far as it is possible; and the most effective way of stamping out an epidemic of such infection in their service remains the abolition of this practice. That it can be dispensed with altogether is, of course, out of the question, but that the vast majority of such examinations that are made are needless there is no denying. And when occasion does arise for the vaginal examination the greatest aseptic precautions should be observed, for even the well-boiled glove in a field rendered as clean as we are able to make it does not preclude the possibility of carrying in infection. The main difficulty lies in our desire either to hurry matters along or to determine the possible chances of another call or two before the consummation of the task at hand. Then, too, it might be suggested that if other methods of determining the position and presentation of the fetus, such as external palpation, auscultation, determination of areas of greatest motion, etc., were cultivated to a greater degree, the occasion for the vaginal examination for such purpose would become more limited.

But above all, let us be clean, a thing that any doctor can and ought to be if he attempts any obstetrics or surgery, and whatever else our sins may be there will be one virtue that will in the end surely produce results of which we need not

be ashamed: there will be fewer wifeless husbands and motherless children, as well as less chronic invalidism and consequent suffering to the patient who is fortunate enough to survive her early infection; fewer gray hairs for the doctor and harsh things said about him.

PATENT MEDICINE AND QUACK DOCTOR ADVERTISING.

We have received a copy of the *Morning World*, a daily paper published in New Orleans, in which there is not to be found an advertisement of a patent medicine or a quack doctor. The editor says that he is publishing a paper in the interests of the people, and in doing so he can not conscientiously carry the advertising of patent medicine manufacturers or quack doctors, as by doing so he would make himself a party to deception, fraud and positive danger to the lives of the people.

In an editorial on "Quacks and Their Agents," he has the following to say: "If you had a wart on your nose and your surgeon began to remove it by soaking your feet you would suspect him. A saloon-keeper who sold you half the villainy contained in the bad whiskey many of the marvelous cures of quackery the moral-wave papers take pay for aiding and selling, would be jailed for poisoning. Yet these papers are shrieking prohibition and high license in one column and selling the vilest, most fraudulent bad whiskey in another column. The only difference is that their bad whiskey is not labeled whiskey but goes under some high-sounding name and purports to cure every ill on the face of the earth.

"The quack and the faker must go at the next session of the legislature. Not only must they go, but the highway print jobbers who promote them for pay must be made to stop it. Police laws prevent the selling of stale fish, and no proposition could be fishier than this class of swindle, and no means of money-getting baser than promoting such fraud. In the matter of public health the state is vitally interested. Health is humanity's highest asset. Steadily civilized government has suppressed encroachments of fakers on human ignorance and credulity and stupidity. The quack is the blatant faker who professes to be able to do more than the sad experience and exhaustive scientific study of generations has realized. A bill should be framed to the end of putting a stop to it, and that the people may know exactly what it means and express what they, as a self-governing body, think of it, this bill should be put before the people and their voice heard in the matter. Let's have no more

fooling about this. The whole abuse spells fraud, dangerous fraud, and it should not be tolerated. The point of view of the public should not be muzzled by a few thousand dollars' worth of advertising patronage placed with the job printers who are supposed to voice public sentiment."

We need a few more daily papers like the *Morning World* of New Orleans that will place principle above financial gain. Some of the daily papers that regularly publish the advertising of patent medicines which are the rankest frauds, and quack doctors who are the worst of knaves and fools, are edited and owned by men who profess to be Christians, some of them being deacons in churches and, sitting under the artificial halo of sanctity, they pose as honest, humanity-loving citizens.

Some of the religious papers are worse offenders of decency and morals than the secular press. While they preach the gospel in one column, in another column they print the advertising of individuals and firms who make a business of taking unfair and dishonest advantage of the sins and ailments of humanity. If the Lord ever takes these editors into Heaven, some of us who believe in the "eternal fitness of things" have no desire to join them.

Some men will sell their souls for a mess of pottage, and the newspaper editor who accepts money for patent medicine and quack doctor advertising belongs to this class. The only way in which the practice can be stopped is by education of the people. The average newspaper owner, whether he be deacon in a church or not, has an elastic conscience and sacrifices principle for financial gain. If he did not do so we would not see so many frauds glaringly advertised in nearly all the newspapers in the country. Most intelligent people recognize the frauds, but the ignorant and the poor do not, and they, the ones who can least afford to be swindled, are the real sufferers. Force the editor to understand that when he loses his self-respect and honor for the sake of securing a few dollars from fraudulent advertising he at the same time loses subscribers and readers, and he will soon mend his ways if for no other reason than to protect his purse.

The medical profession can do much toward educating the public by waging a vigorous campaign among the people against patent medicine and quack doctor advertising. The distribution of the *Collier* articles on "The Great American Fraud" will assist materially in effecting results, and the co-operation of every intelligent, conscientious and public-spirited minister of the gospel should also be secured. Let the editors

once feel that their pocket-books are being touched and they will at once see the force of the argument we make and begin championing the cause for which we contend.

MORE NEWSPAPER RUBBISH.

Apropos of the evil that may be wrought by the desire for mere financial gain in the management of newspapers, the following editorial is quoted from *Collier's Weekly* for March 14, 1908, on "Vivisection":

"Every one must sympathize with those whose hearts are stirred about animal suffering, but the world ought to know that the present outbreak against vivisection has been worked up by a newspaper, hungry for sensation, by an absolute misrepresentation of facts. To restrict further the practice of vivisection means untold cruelty to the human race all over the world. It means that the investigations by which thousands of lives have been saved, and the most dreadful sufferings abolished, must be stopped, and the humane progress of medicine and surgery arrested. The consequences, if an ignorant sentimentality should have its way, are too painful to describe. When any progress in medicine, whether by new methods of treatment or new drugs, is accomplished, tests must be made either on animals or men. All our knowledge of physiological functions, on which all rational treatment must be based, must be learned by observation of some living thing. For this vast gain we pay in animal suffering not one-millionth part of what the hideous pictures and articles in such papers as the *New York Herald* imply. Those pictures could be equaled by descriptions and photographs of every clinic, simply by leaving out the explanation, as the *Herald* does, that the victim, whether a man or an animal, is almost always unconscious, and that the cutting and tearing in operations and experiments are, therefore, in the vast majority of cases, painless. By this bold and money-making misrepresentation, therefore, if applied to clinics where human beings are operated upon, still greater horrors of medical progress might be worked up, with still greater and more harmful excretion of science and its immeasurable benefits to the human race."

Probably some such officious organ will next be demanding the abolition of the dissection of dead bodies or the prevention of animal inoculation, without which Koch's postulates could never have been established nor antitoxin nor vaccine given to suffering humanity.

THE AUTOMOBILE FOR THE DOCTOR.

The *Journal of the American Medical Association* for March 7, 1908, very properly devotes a number of pages to the subject of the automobile as a conveyance for physicians. As might be expected, not all of the contributors to the pages devoted to opinions from physicians are of the same mind as to the value of the automobile for the doctor, but the general verdict is favorable. As a vehicle for use the year around the use of the automobile is confined principally to cities having well paved streets. For ordinary country roads the automobile is adapted to summer months only. But even for limited use the automobile, on account of the saving in time, is a practical conveyance for the doctor to own. Very dependable cars are now made which cost less than \$1,000, and several well-known makes cost \$500 or less. The trouble and expense arising from the use of a car depends very largely upon the operator, though to some extent upon the conditions under which the car is operated. However, two men owning cars of the same make and pattern and operating them over the same roads and for the same length of time may have entirely different results as to trouble and expense, all depending upon the manner in which the cars are used. An automobile is in many respects like a horse; it must have some kind of care and be driven judiciously. If so handled it will give the user general satisfaction by proving economical, time saving, and a source of pleasure. Any well known make of car will do this now.

THE NEED FOR ENFORCEMENT OF ANTI-SPITTING ORDINANCES.

The continued laxity in the enforcement of the anti-spitting ordinance in Fort Wayne, despite the frequent protestations of her capable board of health, is the occasion for a recent resolution passed by the Fort Wayne Medical Society appealing to the board of public safety for the enforcement of such ordinance. And this menace to public health probably flourishes to a similar degree in other cities and towns of our state.

Were it only a question of the insult to the esthetic sense that is wrought by this disgusting picture of filthy sidewalks over which our women are forced to travel, then economy in politics might have a slight semblance of legitimacy for a lack of proper enforcement of the law; but when the health of our people is at stake the most economic measure is that which will conserve the integrity of society to the greatest degree.

It has been reckoned by Heller that a single pellet of a consumptive's sputum contains 300,000,000 tubercle bacilli, or, in other words, if the patient expectorates only once an hour he will liberate 7,200,000,000 of the germs in one day. This sputum deposited upon the dry sidewalks or floors of public places is quickly dried and mingled with the dust of travel, to be inhaled by all who come into the vicinity, or deposited upon edibles or utensils exhibited by grocermen or other merchants in front of their respective stores. True it is that if these germs could lie undisturbed and exposed to direct sunlight they would die in a few hours. But with the continued traffic on the sidewalks, shaded by high buildings, they are very soon ground up in the dust or carried off on the pedestrian's shoes, to be redeposited and inhaled by new hosts. Just how long the tubercle bacillus will retain its virulence in this dried state has been the subject of many investigations. Zoma found dried sputum virulent up to ten months, while Sawitzki found it lifeless under ordinary conditions after two and one-half months, and various other observers present different data. Probably Cornet reaches the average when he says that one may assume that after about three months dried sputum loses its virulence, but under extraordinary circumstances retains it as long as six or eight months. So that if one pictures a city with lax health regulation, whose population is 60,000 or more, one-seventh of whom are tuberculous and a great share of these in the ambulatory and spitting stage, emitting each day over 8,000,000,000 bacteria of six months viability, any one of which is capable of setting up a new focus where resistance is lowered, the real danger to society becomes apparent to the merest tyro. And besides the germs of consumption, those of other infectious diseases, as la grippe, pneumonia, diphtheria, pertussis, etc., may be disseminated by this vicious habit and add their jeopardizing influence to that of the tubercle bacillus.

The inroads wrought upon the resources of the state by tubercular infections are so various that it is difficult to conceive of any possible hesitancy on the part of the state and municipality in establishing methods of curtailment. In the first place, the victims are selected from the most productive age of the individual's life, viz.: early adult and middle life, the time when families are being created and homes established. Then, too, it is not alone a question of the withdrawal of the wage earner's capacity for support, but the drain necessary for his care throughout the usually long-continued illness is a factor of no mean importance, for not infrequently, his resources ex-

hausted, the poor victim is forced back, a charge upon the county or municipality in which he is stricken. And public responsibility does not end even here, for the widowed mother of a family of small children may easily find herself utterly unable to provide for the little ones robbed in early life of a father through the lethargy of narrow-minded politicians.

In communities which have had little or no opportunity for enlightenment along the lines of sanitary science, ignorance might be offered as a possible excuse for neglected prophylaxis, but the existence of an ordinance for the control of such a public nuisance is proof that the public has realized the necessity for such regulation and has a right to expect the proper enforcement of its laws.

It is more than possible that a few prosecutions, indiscriminately yet conscientiously conducted, would serve to impress upon the public that those having jurisdiction mean business in the discharge of their duty.

SCIENTIFIC EDITORIALS

SCHOOL SANITATION.

We all recognize the necessity of forming the minds of our children by beginning the process early in life. It took many years for the reformers to impress this primary fact upon the public mind, and not yet has it been possible to make clear to the same mind that youth is also the time to form the body. Both the mind and body are plastic in youth and may be easily bent in all directions. The child who is made to occupy a seat and desk which does not fit its body is being twisted out of shape, and nervous derangements are sure to follow. It does not seem wise to force an innocent child into positions which will destroy its body and tear down its nervous system. Of course we are impractical and foolish to do such a thing, but it is being done all over the State of Indiana, and has been done ever since our present school system began. All lower grade schoolrooms should be provided with adjustable seats and the greatest care should be taken to adjust the seats to each pupil. If this one little sanitary requirement were met there would be an enormous saving of strength and increasing of efficiency.

In our ignorance and in our false economy we frequently insist upon not giving the school children the full quota of air which Nature says they must have in order to be strong and well. Air is free, it can not be taxed and the trusts can not

corner it, and there is no reason except ignorance and false economy why the children should be denied the amount required by Nature. To give them less than this amount means to maltreat them and to force upon them inefficiency, ill health and disease. The old log schoolhouse with its big open fireplace was well ventilated, whatever else may be said about it. If children are given an abundance of pure air, which is the most important of all foods, and the full quota of oxygen in the blood, they are in a measure provided a protection against the ill conditions named.

The lighting of a schoolroom is a very important matter. This fact has been overlooked, although it is as plain as day when one's attention is called to it. We all know that to look into the sunlight is blinding, and it is also blinding, in a degree, to be compelled to sit, as school children frequently are, and look into the light. Yet there are schools in Indiana where children are compelled to sit all day looking directly into the light. Parents who force such conditions upon their children are foolish, indeed, and they must expect to buy glasses and to spend much money in treating eye affections of their children afterward. Schoolrooms should all be lighted from one side and the light should fall over the left shoulder of the pupil. Neither teacher nor pupil should be compelled to look into the light. The glass area should not be less than one-sixth of the floor area. Less than this will not admit sufficient light except on bright, sunny days.

If the light falls over the right shoulder of the children then shadows appear when the writing lessons are given, and the child is certain to lean forward and distort its body in order to avoid said shadows. I have seen school children twisted into very curious positions in order to avoid the shadows which appear upon book and writing paper when the light falls over the right shoulder or from behind. In one of the Terre Haute schools I saw a one-legged, tall boy actually get out of his seat and kneel on the floor in order to secure the proper light for his work.

The medical inspection of school children is of more importance than all of the commercial interests of any community. We live exclusively and entirely for our children. That is all we are good for and all we are intended for. The imperfect school child should be searched out and the imperfections corrected. It is now well known that not less than 30 per cent. of school children are physically imperfect. Their eyes may be imperfect, their hearing imperfect, or their respiratory apparatus imperfect. To allow these imperfections to continue and not remove

them is wickedness itself. The mouth-breathing child should be operated upon as early as possible and the obstructions which cause the mouth-breathing removed. To allow the ill condition to continue almost always means the death of the child.

It would seem unnecessary to make any argument in favor of the construction of school buildings so they would not be fire traps, but inspection in every city and town and hamlet in the state shows that impractical, extravagant and unreasoning men have been at work, seemingly doing all they can to make escape of school children impossible if fire should occur. This is the condition in the Bloomingdale and Harmer schoolhouses at Fort Wayne. The architects and school authorities who built these two buildings were actually stupid; at least so far as constructing stairways and exits and entrances to buildings are concerned. These buildings are flimsily constructed. They are not strong, because it was possible for one person standing in the middle of the room, by simply jumping up and down, to shake the windows, the floors giving very perceptibly. It may be it will require the sight of several score of charred children's bodies to arouse the school authorities and some of the citizens of Fort Wayne to recognize the fact that some of their school buildings are fire traps into which they have been forcing their children for so many years. God forbid that this should be, but it does seem impossible for some people to learn except through disaster, suffering and death. Precept and example seem not to impress them.

One of the prominent forces which prevents progress in this world is the desire of cheap politicians to make reputations as economists. This cheap and pitiable class do not know that good works are economy and are the way to success. They think that money not spent for good things is money saved. They, of course, do not know the meaning of the word "economy" and are entirely unfitted for public office. Some day the people of Indiana will understand that it is a disgrace to be compelled to purchase a short coffin, and I think that every death under 40 years of age should be the subject of careful, medicolegal investigation. In Indiana 1,333 children in the school age of 7 to 14 years died in 1907. This is a disgrace to our state and a comment upon our intelligence. It is certainly true that 90 per cent. of these deaths were preventable, and perhaps all of them. These children were killed. Truly ignorance and stupidity are the only sins.

J. N. HURTY.

Indianapolis.

THE PROPHYLAXIS OF OPHTHALMIA NEONATORUM.

When we consider that of the number of children admitted into the asylums and schools for the blind last year one-quarter had lost their sight from ophthalmia neonatorum, and that in some of these institutions the number runs as high as 30 to 35 per cent. of the whole, it becomes evident that there is great need of more effective measures to prevent such unnecessary sacrifice.

Prevention of ophthalmia neonatorum can only come through education. The man who contracts gonorrhea should know that he has a disease of unlimited possibilities for harm to an innocent wife and any children that she may bear. The wife has a right to know that the disease which her husband gives her is a serious menace to her and to future offspring. There is no excuse for practicing deception concerning this subject, or in permitting ignorance to prevail until irreparable injury has been done.

The parents and in particular the mother of every new-born babe should know that the first discoverable symptoms of abnormality in the babe's eyes, such as redness, swelling or slight discharge, is a warning note which should be heeded and skilled advice sought and appropriate treatment adopted at once. The possible penalty attached to delay should be clearly understood. Doctors and midwives should also be impressed with the importance of these facts, and legal penalties should be attached to failure to adopt not only proper precautions to prevent the development of ophthalmia neonatorum, but the recognized treatment to check the disease if it shows indications of developing. In other words, the parents and the attendants upon mother and child should know what ophthalmia neonatorum is, how it is acquired and how it is avoided.

This campaign of education can be carried on most efficiently by departments of public health. Circulars of advice should be distributed to mothers, physicians, nurses and midwives. The danger to the new-born child should be clearly pointed out, as also the immediate necessity of adopting appropriate treatment if the child's eyes become at all inflamed. The instructions should in particular point out the necessity for cleanliness and the most approved manner of securing it. It is not enough to say that the child's eyes should be washed out or that certain prophylactic measures concerning the care of the mother before the child is born should be adopted, but the exact way in which this should be accomplished should be plainly described. Nothing should be taken for granted.

In a suspected or developing case of ophthalmia neonatorum the practice of Credé's method has proven of unquestioned efficiency, and we believe that any board of health is warranted in recommending the method as a routine practice in all suspicious cases. But here again the instructions should be explicit, and it is even questionable if it would not be advisable for the board of health to furnish a properly prepared 2 per cent. solution of the pure silver nitrate, together with detailed instructions as to just how and when the solution should be used. It should be made perfectly clear that a single drop of such a solution, carried on a small glass rod and carefully applied in the eye of the new-born babe, will produce no harm. It is an excess of the solution which may excite undue reaction.

Much may be expected from a systematic campaign of education carried on by boards of health, but to be most efficient some legal liability should be attached to failure on the part of physicians and midwives to follow the advice and instructions given. There is no logical reason why recognized prophylactic measures should not be legally enforced in an attempt to prevent such a record of blindness from ophthalmia neonatorum as our statistics now show. The results which may be accomplished justify the means proposed.

ALBERT E. BULSON, JR.

Fort Wayne.

EDITORIAL NOTES

SEND the title of your paper for the French Lick meeting of the state association to Dr. F. C. Heath, Newton Claypool Building, Indianapolis.

MECHANICALLY speaking, it might be said that the material difference between Hughes and Fairbanks is that while the one is "hand-forged," the other is "machine-made." Then Cannon's seventy odd years must have served only to "mould" him.

ONE of the quack doctors of Fort Wayne advertises that he will cure all cases of appendicitis without an operation. He also advertises to treat the incurable blind. Is there any reason why the license to practice medicine should not be taken from this medical pretender who is constantly victimizing innocent people?

WE BELIEVE that Mrs. Cora B. Miller, of Kokomo, should be prosecuted for practicing medicine without a license. She is prescribing for any women who are foolish enough to write her

concerning their ailments, and we can find no record of a license granted for the practice of the healing art.

ONLY two days for the state association meeting at French Lick, but the committee on scientific work will arrange the program so that plenty of time will be devoted to discussion of papers. We hope that the program will contain few papers, but those few of superior quality. Thus will we have more and better discussion, which is really the most valuable feature of any medical meeting.

DR. ABBOTT and his satellites who comprise the Abbott Alkaloidal Company have successfully "worked" a portion of the medical profession for financial gain, but we are inclined to believe that their operations in this direction will have a setback now that *The Journal of the American Medical Association* and the daily papers of Chicago have publicly exposed the deception and fraud through which gain was obtained.

ALL things being equal, we trade with the dry goods merchant, the grocer and the butcher who is our regular patron. That is reciprocity.

The members of the Indiana State Medical Association own *THE JOURNAL*. A certain number of reputable firms advertise in *THE JOURNAL* and thus are our patrons. All things being equal, we owe them our patronage in return. Reciprocity is the basis of all trade.

IF YOU hear any doctor say that he has not received this number of *THE JOURNAL* it is fairly safe for you to assume that the doctor making the complaint has not paid his state association dues, which include a subscription to *THE JOURNAL*. The name of every doctor who has paid dues is on our mailing list, and barring an occasional miscarriage in the mails *THE JOURNAL* should be received by every doctor whose name appears on our list.

THE Huntington County Medical Society has succeeded in inducing the Huntington city council to pass an ordinance imposing a license fee of \$50 per day upon all itinerant doctors. The ordinance is being rigidly enforced, with the result that all traveling quack doctors are canceling Huntington from their itineraries.

The plan is worthy of adoption by all cities, and if generally adopted and enforced would soon result in driving the traveling quack doctor out of business.

SELDOM do the physicians of Indiana have such an opportunity to attend a meeting of the

American Medical Association at such a small sacrifice of time and money as is offered them this year with Chicago as the meeting place. It has been several years since the association has held a meeting nearer than a thousand miles or more away, and to have it this year right on the border of Indiana is a rare opportunity for benefit at small sacrifice of which every progressive physician of the state should take advantage.

THE people are beginning to find out that the best doctors are those doctors who regularly attend medical societies. It is the busiest doctor who always finds time to attend medical society meetings and to read medical journals and books. The doctor who regularly fails to attend the meeting of his local medical society and gives as his excuse that "he is too busy," or that he learns nothing by attending the meetings of his local society, is generally the man who has the least practice, is the least respected in the community, and is in most need of the benefits to be secured from medical societies. The people are beginning to find this out.

WE WANT a list of the names and addresses of all the doctors in Indiana who are not at present members of any county medical society but who are eligible to membership. We hope that the secretaries of county societies will take the hint and help us to secure such a list. Our intention is to send sample copies of *THE JOURNAL* to every doctor whose name appears on the list, together with a letter soliciting application for membership in the county society of the county in which the doctor resides. If county secretaries will assist us in this organization work it will not be long before the number of members in the state association will be doubled.

MEDICAL fees are altogether too small, but it is a question if many doctors are not paid much more than they are worth, no matter how small the fees. The man who charges 25 cents or 50 cents for a prescription for headache tablets for the relief of a headache, the cause of which he does not know, is charging more than his services are worth. But the man who examines the patient carefully and determines to a certainty or to his own satisfaction that the headache is due to certain pathological conditions and then prescribes for the relief of those pathological conditions, is worthy of a fee in keeping with the skill and good judgment exercised, and we believe that the average patient is willing to pay accordingly.

THE Collinwood school fire was a terrible disaster, but when it is considered in all its phases we wonder that there have been no more similar catastrophies, for the conditions are favorable to such a slaughter of children in hundreds of school buildings throughout the country. Ignorant and penurious school boards fail or refuse to place around our school children the proper safeguards, and parents are too often unacquainted with or indifferent to the existing conditions. We hope that competent judges will condemn every school-house in Indiana which is unsafe on account of danger from fire, or unhealthy on account of bad ventilation and lighting. Better tear down 500 buildings than have such an experience as Collinwood has passed through.

WILMOT H. WHEELER, Chicago, "General Secretary of the School of Accuracy and College of Prevention," says, in a circular letter sent broadcast, that he is going to jail for helping sick folk. The Illinois State Board of Health is responsible for this sad state of affairs, and all because Mr. Wheeler pretended to cure the sick without going through with the formality of securing a license to practice medicine. The circular letter is an appeal for help—financial and political—so that influence can be brought to bear upon the governor in an effort to secure an exercise of the executive's pardoning power. Mr. Wheeler's career as a "healer" has been cut short, and we hope that a term in jail will make him fully appreciate the error of his way.

Do you know the doctor who is always borrowing medical books and instruments and generally forgets to return them; who regularly writes for "sample copies" of various medical journals in order to get medical reading without paying for it; who is always asking for your advice concerning the proper treatment for his cases but never invites you in consultation; who asks you to render gratuitous professional services for himself, his immediate family and all his relatives without as much as thanking you for the courtesy; and who will be the first to kick you if you happen to be down, and considers it fair to "knife you" when you are not looking? Do you know him? Well, there are a few such medical shrimps running loose, and they should be branded for the protection of the young and inexperienced as well as the old who are unsuspecting.

To CONCLUSIVELY prove the unreliability of the claims of the Abbott Alkaloidal Company with reference to H-M-C anesthesia (a form of anes-

thesia considered positively dangerous by many recognized authorities) was an effort on the part of *The Journal of the American Medical Association* which deserves appreciation at the hands of the medical profession. But to prove that the Abbott Alkaloidal Company and its resourceful president, Dr. Abbott, are guilty of "working" the medical profession and even the public in many other questionable ways for financial gain is throwing light into dark corners at a rapid rate. How could the association journal be so cruel, so heartless? Supposing the Abbott Alkaloidal Company has a family of helpless dependents. Think what it means to deprive these unfortunates of the sustenance wrung from the gullible medical men!

THE field of surgery is an attractive one, but there is not enough surgery to go around. If the young graduate would devote his time to the study of internal medicine and forget his surgical ambitions it would be better for the public. The enthusiasm of the untrained surgeon who is successful in an uncomplicated case of appendectomy is very amusing, but I would feel more like congratulating the patient upon his or her escape. God help the next case as the same man plunges into a mass of pus and adhesions. Abdominal surgery should only be done by trained men and trained assistants.

Internal medicine is sadly neglected. Osler has well said: "In the fight against ignorance and quackery, diagnosis, and not drugging, is our chief weapon of offense." The undergraduate is taught principles based upon scientific facts. This is all the college can do for him. As to whether he is a good physician depends upon the man himself.—A. H. Lippincott in *The Journal of the Medical Society of New Jersey*.

"*The Medical History of Delaware County*" is the title of a reprint which we have just received from the author, Dr. G. W. H. Kemper of Muncie. The article gives a history of the medical affairs of Delaware County from 1827 to the present date and concludes with an alphabetical list of physicians who have at one time or another lived in Delaware County during the time mentioned. It may be surprising to many to know that during the time covered by the history 436 physicians have practiced in Delaware County. Concerning the record of these physicians, Dr. Kemper says: "The record of the physicians of Delaware County has been a creditable one; a few moral delinquencies have existed. They have been industrious, as shown by

the numerous contributions to medical literature contributed by our citizen physicians. Our death rate has not been excessive; our health officers have been competent, and our surgeons have successfully performed nearly all the operations known to surgery."

The pamphlet is of increased value because of a splendid likeness of Dr. Kemper which appears as a preface.

Collier's Weekly deserves praise for many editorial utterances in condemnation of actions and policies which are detrimental to the best interests of the public. But physicians in particular will be interested in the vigorous warfare which this outspoken weekly paper is waging against the Antivivisectionists.

Numerous editorials have of late been published in *Collier's* in defense of the practice of vivisection done in the interest of scientific advancement and with the ultimate result of preventing suffering and loss of life. These editorials have been so logical, truthful and forceful that they must of necessity have had great weight with the thinking public, and to judge by the enormous circulation of *Collier's Weekly* the thinking public has probably read the editorials. The fight which this leading weekly paper is making will have more weight and far greater effect than the work of a dozen scientific journals and an equal number of societies composed of scientific men, for the reason that *Collier's Weekly* goes to the reading and thinking public whereas the scientific periodicals go to scientific men, and scientific men are usually thought to be working for self-interest.

We wish that more journals on the order of *Collier's Weekly* and many newspapers having a keen conception of what is right and just, and less regard for pecuniary considerations, would take up the fight for vivisection and many other humanitarian projects for which the medical profession stands responsible.

THE Keeley Institute, of Marion, Ind., W. V. Daniels, M.D., manager, is sending letters to physicians soliciting liquor or drug habit cases for treatment on a commission basis. With reference to the fee paid the physician for referring the case the letter contains this significant statement: "It may be as well to let the fact that you receive something for your time and trouble remain a secret between us."

This is another instance where the doctor is asked to sell his self-respect for money. If the

doctor is entitled to a fee for referring a liquor or drug habit case to a sanitarium why should he not honestly and openly charge the fee to the patient? There is no excuse for such traffic in the misfortunes of others as is contemplated by the offer of the Keeley Institute of Marion. There is no more reason why a sanitarium for the treatment of liquor or drug habit cases should pay for cases referred than a sanitarium for the treatment of tuberculosis or any other disease should pay for cases referred. There is room in every populous community for one or more sanitariums for the treatment of liquor or drug habit cases along scientific lines. Such sanitariums, if conducted in an ethical manner and by physicians of recognized professional standing, would soon receive the endorsement and support of the medical profession and would deserve such consideration. But the Lord forgive the medical men who traffic in liquor or drug habit cases for the benefit of themselves and any of the Keeley institutions.

For the benefit of prospective contributors to THE JOURNAL the editor desires to say that it is taken for granted that when a paper is submitted to THE JOURNAL it is for the exclusive publication in THE JOURNAL and is not to appear elsewhere. The editor has, in the twelve years' experience in editorial work, learned that some medical men have an itching for publicity, and with a view to greater advertising in the medical profession do not hesitate to submit duplicate copies of an article to numerous medical journals with the request that it be published in an early issue. Of course these men do not often fool the editors a second time, for the "repeaters" are very well known to most editors.

It is well enough to remember that every editor solicits, and is pleased to receive, material suitable for publication, but he does not want to publish second-hand articles, though the articles may be ever so good, and he feels that he has been imposed upon when an essayist takes such advantage of him. Therefore, if any of our prospective contributors submit articles for publication let them remember that no editor wants an article that has appeared or is to appear elsewhere, as he prefers to publish an abstract if he can not have the exclusive right to the original. We call attention to this matter because we have recently refused to accept for publication the carbon copy of a paper which we had reason to believe, and have since learned, was offered to other journals, and have also felt called upon to refuse to publish the typewritten copy of a paper which

we know has already been published in a journal issued in a different state.

"ASK your doctor all about Ayer's non-alcoholic sarsaparilla. Then you will know whether you want it or not."

Such is the heading of an advertisement in large type which greets the reader in many of the daily papers to-day. Of course there are a few good-for-nothing doctors who might, perhaps, recommend Ayer's sarsaparilla, but a very large proportion of the medical men of the country would not think of recommending any patent medicine and certainly not one of barn-roof fame, and the J. C. Ayer Company knows this as well as we do. But, nevertheless, the advertising will pay, for the reason that the class of people who can be induced to buy a patent medicine—and the number runs into the millions—will never take the trouble to ask any physician concerning the merits of Ayer's sarsaparilla, but take it for granted that the remedy has the endorsement of the medical profession, and the Ayer Company knows that such will be the assumption.

We wonder what the effect would be if the medical profession as a whole publicly through newspaper advertising put itself on record as deprecating the use of patent medicines in general and Ayer's sarsaparilla in particular in answer to the misleading advertising to which we refer. Isn't it time for the medical profession to give the public a little wholesome education? We might take lessons from the Christian Scientists, who have a "publication committee" in every populous community. Whenever anything derogatory to Christian Science is published in any newspaper or periodical, immediately the "publication committee" gets busy and the public hears the Christian Science side of the story. But the medical profession, wrapped in a wet blanket of professional dignity, permits everything to go unchallenged, no matter how untrue it may be or how detrimental to the interests of the medical profession and public.

EDWARD BOK, editor of *The Ladies' Home Journal*, said, at a meeting of the Philadelphia branch of the American Pharmaceutical Association, that a large number of physicians prescribe nostrums. In consequence he has been accused, in print and in scores of letters, of making an attack on the medical profession. He answers his critics in an article which appears in *The Journal of the American Medical Association*, March 21, 1908, and reiterates his accusations in an emphatic manner.

In our judgment, the charge preferred by Mr. Bok is true, and while the truth in this particular instance hurts, there is no reason why we should permit the sting to incite us to anything more than an effort to purge the medical profession of the disreputable and degrading practice of which we are accused. It is the rankest kind of nonsense for us to deny that a large proportion of medical men (probably more than a majority) are guilty of prescribing nostrums. The records of the pharmacists and the shelves of the dispensing physician bear testimony to this fact. Mr. Bok is, therefore, warranted in making his so-called "attacks" on doctors, and in asking the question, "What business has the physician to prescribe these nostrums at all"?

There is no logical reason why any doctor should prescribe any drug or remedy the ingredients and action of which he is unacquainted with. He is under moral obligation to prescribe only such preparations of which he knows the exact ingredients. To do anything else places him in the position of jeopardizing the patient's interests and perhaps his life to ignorance. And how illogical it is for us to ask the public to abandon the practice of taking patent medicines of unknown composition and action when we are guilty of prescribing nostrums the exact composition and action of which is unknown to us. While we are asking others to clean house isn't it good policy for us to clean house ourselves? It is a little humiliating to have Mr. Bok publicly brand us as he has, but let us frankly admit that we deserved the searing we received and profit by it.

OUR very efficient and capable secretary of the State Board of Health, Dr. J. N. Hurty, has incurred the displeasure of the school board of the city of Fort Wayne, and all because he found occasion to state publicly that two of the school buildings in the city of Fort Wayne are atrociously unhealthy on account of inadequate sanitary arrangements, and unsafe because of the danger from fire. The local city board of health of Fort Wayne has also come in for the displeasure of the same school officers because it has found occasion and reason to sustain Dr. Hurty in his contention.

In a burst of indignation the members of the school board and the superintendent of schools assert in newspaper interviews that Dr. Hurty is sensational in his statements and that the facts do not warrant any such charges as have been made. They even go so far as to intimate that no such catastrophe as occurred at Collinwood could possibly happen in the city of Fort Wayne,

for they claim that the buildings are models of security from fire, and from a sanitary standpoint are all that could be desired.

The action of the school authorities in opposing the opinions of such men as Secretary Hurty, whose reputation as one of the leading health officers and sanitarians extends from the Atlantic to the Pacific, and of the local board of health of Fort Wayne, containing as it does two of the city's most efficient and competent physicians, is, to say the least, a display of poor judgment and little diplomacy. The people are not quite so stupid but that they will accept the opinions of authorities and those competent to judge rather than the opinions of those who are attempting to cover up their own lack of efficiency by the display of antagonism which of necessity must react to their discredit.

The school buildings under consideration have been pronounced by numerous competent judges as unsafe on account of the danger from fire, and they are shamefully unsanitary. The members of the school boards have been told this before Dr. Hurty pronounced his verdict, and had they displayed even a little tact and good judgment they would have at once acknowledged that such a condition of affairs existed and taken some measures to correct the evils. But, like most school boards, elected as a result of politics and not because of fitness for the position, it required what they term "sensational charges" in order to stir them to action because of the indignant demands of an outraged public.

We have no sympathy for the school board, and can only say that we hope that Secretary Hurty will use the prerogative of the law, as is his privilege, by demanding that the conditions about which he has complained be corrected at once. The lives and the health of our children are too valuable to be sacrificed to the ignorance and stubbornness of a school board or the false sense of economy of any political party which seeks to save money by the avoidance of the expense of building schoolhouses which are modern as to sanitation and safety.

And this reminds us that the laws of Indiana make provision for the condemnation of public buildings which are unsafe from any standpoint, and it is high time that the laws are enforced. Of course, some ignorant school boards and a few taxpayers will howl themselves black in the face when some fire-trap and disease-breeding schoolhouse is condemned, but human life is worth too much to be sacrificed because of the wails of this class of people.

REPRESENTATIVES from two well-known firms dealing in instruments and physicians' supplies

are now calling upon Indiana physicians soliciting orders. Neither of these firms has ever advertised to any extent and neither firm is represented in *THE JOURNAL*. One of the firms, when asked to advertise in *THE JOURNAL* replied that it was not necessary to advertise, and that a large business in Indiana had been built up without patronizing the advertising pages of any medical periodical. We sincerely hope that our readers, who are the owners of *THE JOURNAL* and interested in its success, will make it quite plain to these firms that it does pay to advertise, and that patronage from Indiana physicians will be preferably given to those firms that advertise in *THE JOURNAL*. In this connection we desire to call attention to the fact that six of our advertisers, all having established reputations for honorable dealing and excellent quality of goods sold, are able to supply any physician with instruments, electrical apparatus, office furniture or, in fact, equipment of any description. From the income derived from the advertising of these firms we are able to publish a larger and better journal than otherwise would be possible. These firms are deserving of and should have the patronage of every member of the Indiana State Medical Association, and we urge that they be given the preference whenever equipment of any description is purchased. This is not meant to convey the idea that other firms may not be as responsible in every way, but that no other firms are better, and consequently it is good business policy, all things being equal, to patronize those who patronize us.

OUR child-bed deaths are altogether too many and puerperal fever exists to too great an extent, and all because some medical men have not learned, or if they have learned they do not put into practice, even the ordinary rules of surgical cleanliness. When a doctor is called to attend a case of confinement he is called to attend a surgical case and surgical cleanliness should be a part of his preparation to care for the patient. Puerperal fever is a septic fever due to inoculation, and in nine cases out of ten in private practice the attending physician does the inoculating. Oliver Wendell Holmes was a pioneer in the movement that has done much to prevent the slaughter of innocent women and the wrecking of happy homes by puerperal fever, but there are many doctors who fail to put into practice the lessons which Holmes and every teacher following him has taught; consequently child-bed deaths continue to occur directly as a result of the doctor's unclean hands, instruments, clothing and the like which are brought in contact, during or after labor, with the genitals of the female. No physician can attend erysipelas, scarlet fever,

diphtheria or any infectious disease and at the same time safely pursue his obstetric practice unless he takes the precaution to go through a process of thorough disinfection and sterilization of person and clothing before engaging in child-bed work. The prevailing idea among many physicians that a free use of corrosive sublimate and carbolic acid on the hands and instruments is all that is necessary is entirely wrong, as the infection may be carried on the clothing or in the beard or hair. Then, again, some men who are clean as to clothes and person from an esthetic point of view are not surgically clean, though they imagine themselves to be so. The truth is they either do not know what constitutes surgical cleanliness, or, knowing, are too lazy or indifferent to practice it. In either case it is a criminal liability assumed.

Puerperal fever occurs sufficiently often to warrant us in believing that some law should be enacted to safeguard the parturient woman. There is no reason why innocent women should be sacrificed as a direct result of the criminal carelessness of doctors.

For a long time it has been known by some physicians that the Abbott Alkaloidal Company and its journal, *The American Journal of Clinical Medicine*, have shamefully prostituted the medical profession to commercial ends, but it remained for the *Journal of the American Medical Association* (March 14, 1908), to publicly expose some of the disreputable practices adopted to exploit the medical profession. Prefacing its remarks on the subject, the *Journal of the American Medical Association* says:

"We have heretofore called attention to the wildness and unreliability of the claims made by the Abbott Alkaloidal Company for some of its products. This week we shall discuss some of the methods this company has adopted in building up and conducting its business. What follows, in brief, indicates:

"That the president of the Abbott Alkaloidal Company has used and is now using his position as a member of the medical profession as a commercial asset.

"That the company is publishing what purports to be a medical journal devoted to the medical sciences and to the interests of medical practitioners, but which, to all intents and purposes, is a house organ devoted to the interests of the company and to the advertising of its products.

"That the president and vice-president of the company, though engaged in commercial lines, are members of medical societies and use this membership in medical meetings to advance the interests of their firm.

"That the same officers, for the same reasons, flood the reading pages of medical journals with so-called original articles which are but thinly veiled advertisements.

"That by glowing promises the company has induced physicians to become financially interested in its business and thus users and promoters of its products."

The article, which is quite long and contains ample evidence to support the charges made, concludes with a statement as to why the *Journal of the American Medical Association* publishes the exposé, and is as follows:

"Why do we devote so much space to this concern? What is the motive? The same that has prompted us to expose fraud in connection with the nostrum business; that has led us to enlighten the medical profession regarding the various ways in which it is being exploited; and that has caused us to give publicity to facts which physicians ought to know, and which they can not know unless they are enlightened by the journals that represent them. *The Journal* is performing the function of one representing a profession; that is, it is enlightening the members of the profession it represents regarding matters of vital interest to the individual and to the profession as a whole."

We congratulate the medical profession upon having an organ like the *Journal of the American Medical Association* which fearlessly exposes the questionable methods and practices of such concerns as the Abbott Alkaloidal Company and others who exploit the medical profession. Medical men are too frequently victimized outside the ranks of the profession without having to suffer at the hands of those within our ranks who pose as our benefactors while at the same time they are deluding and defrauding us for their own financial gain. It is eminently proper for the journals owned and published in the interest of the medical profession to give publicity to facts which physicians ought to know, and *The Journal of the American Medical Association* has performed a duty, for which it deserves great praise, in exposing the frauds in connection with the Abbott Alkaloidal Company as well as the nostrum business. It is hoped that medical men in general will profit by the information thus furnished, as they should also approve of the efforts of the *Journal of the American Medical Association* to safeguard their interests.

THE danger of severe electric shocks to operator and patient while using various electrically-lighted instruments has recently been pointed out by Dr. E. Fletcher Ingals (*Jour. A. M. A.*, March

1. 1908). The subject is worthy of serious consideration, for "short circuits" are liable to occur when least expected, and if the current is taken from the ordinary commercial circuit it is possible to secure a shock that might prove fatal. To lessen the dangers Dr. Ingals, while using electric instruments, wears rubber gloves and rubber overshoes, and places his stool on a rubber sheet. To guard the patient there are rubber castors on the table. He thinks that the question arises whether some of the hitherto inexplicable deaths during bronchoscopy may not have been due to galvanization of the vagus nerves. Danger from galvanization of the vagus by instruments introduced for electrolysis of esophageal strictures is well known to laryngologists. In bronchoscopy the metal tube is quite as close to these nerves as the electrodes would be in the operation just referred to, and in unexpected ways the current may be passed through them.

"Doc" SLOUCH has some practice because he is the only physician in a town of several hundred inhabitants and the nearest confrère lives eight miles away. When not "seeing-patients" he can usually be found at the livery stable, where much time is spent in playing *pedro*, with a greasy pack of cards, in the company of a congenial crowd of uncouth and illiterate stable hands. His clothes are spotted with mud and numerous traces of tobacco juice, and aside from being worn and out of shape they also show signs of the depravity of the owner by presenting a rip here and there and an absence of the requisite number of buttons. The shirt, supposedly once white, is liberally splashed with spots of tobacco juice, and in place of regulation collar and necktie a large well-worn brass collar button ornaments the frayed collar band. The hair and stumpy beard show no evidence of having lately come under the influence of comb or brush, and the dirty hands, with long finger nails, under which can be seen a rather unusual quantity of dirt, indicate an aversion to soap and water. "Doc," as he is familiarly known in his home town, is said to be "a first rate doctor," even though, as one old woman informed us, "he is not very tidy." When not sleeping or eating he works his jaws constantly in an effort to extract the juice from a good-sized "chaw" of fine cut, and whenever he expectorates, which is about once every minute on an average, a stream of brown fluid comes out like a geyser and threatens to inundate everything within range. Usually some of the chocolate-colored fluid dribbles over chin and onto shirt bosom and clothes, but this does not seem to be a matter of the slightest concern to the expectorator. It was a pleasant

day and not wet under foot when we met "Doc" in consultation, but this did not deter "Doc" from wearing his felt boots and heavy rubbers, for, as he told us, he was afraid of "ketching cold" if he wore shoes. In the clean and well-furnished home of the farmer patient "Doc" continued to wear his well-worn felt hat (also because he was probably afraid of "ketching cold" if he removed it) and to work his jaws overtime on his quid of finecut, only pausing now and then to squirt a shower of the brown juice into a convenient stove, where it sizzled and steamed as it struck the burning wood. A bright, clean and neatly dressed girl of 12, daughter of our patient, complained of feeling ill, and "Doc" prepared some medicine for her from his antiquated looking medicine case. The dirty finger, with the long finger nails covering a quantity of filth all too plainly visible, was used to mix in a spoon a dose of the medicine which was offered and rather hesitatingly taken by the girl. Upon leaving the house "Doc" volunteered the remark, "Them's one of my best families and I want you to treat them white."

Except for the name of the physician, the above is a recital of facts based upon an actual experience and observation in connection therewith. Fortunately there are few such doctors as the one described, but there are a great many medical men who are altogether too careless of personal appearance and too indifferent to the rules of ordinary cleanliness. Clothes may be ever so cheap and plain or well worn, but there is no reason why they should not be clean, and the doctor who does not keep face, hands and finger nails clean deserves to have his license taken from him. Chewing tobacco is a filthy habit at any time, but is particularly so when practiced by a physician. Sick persons are oftentimes more observing and are generally more easily offended than those who are well, and it certainly is more or less disgusting for them to be attended by a tobacco chewing, dirty and generally unkempt appearing doctor. If they tolerate attendance of such a man it usually is through force of necessity, or as a result of recognition of unusual traits of character or ability which seemingly outweigh the repugnance produced by the punishment of the esthetic sense. But true ability and high character are incompatible with filth and unkempt personal appearance of the physician, and no physician desiring to earn the respect, confidence and patronage of a desirable class of people can afford to ignore the ordinary rules of cleanliness and tidiness in personal appearance any more than he can afford to ignore the necessity for being progressive in the practice of his science and art.

If "Doc" Slouch sees this article, and no doubt he will, we hope he will take the hint and at once undergo a process of refurnishing, fumigation and sterilization from head to foot (not omitting either feet or head), for he needs such an overhauling. Incidentally it may be added that the hint could with profit be taken by some other doctors of our acquaintance who need a little soap and water treatment, a clean shirt, collar and cuffs, a shine, a little pressing and renovating of the clothes, and correction of some disgusting personal habits.

CORRESPONDENCE

NOTICE TO SECRETARIES AND AUTHORS OF PAPERS FOR THE NEXT MEETING OF THE STATE ASSOCIATION.

In order that we may publish in the May issue of *THE JOURNAL* as complete a preliminary list as possible of the papers to be read at French Lick, all titles of papers should be in the hands of the committee on scientific work before May 1, 1908. To avoid mistakes from overlooking or misplacing of titles already sent in, we would request that all authors send in titles of papers whether such titles have been sent in before or not.

T. C. KENNEDY,
JOSEPH R. EASTMAN,
F. C. HEATH,
Com. on Scientific Work.

THE POSTGRADUATE COURSE OF STUDY A BOON TO THE GENERAL PRACTITIONER.

TERRE HAUTE, IND., March 20, 1908.

Editor The Journal:—Under the old regime of monthly meetings and long formal papers there was perhaps forced upon different county secretaries the unwelcome knowledge that the general practitioner had lost faith in the divine ordinance of the county medical society and for the following reasons:

1. Meetings were held too far apart to maintain enthusiasm at the proper working temperature.

2. He rarely knew what the topic for discussion would be, he made no preparation and there was no incentive to go except primordial euri-osity.

3. His ears would finally droop while listening to the second thirty minutes of a paper, copied out of Sajou's "Internal Secretions," or

he would writhe at the mercy of the brilliant young surgeon who had just completed his second renal decapsulation.

4. The papers often concerned matters which rarely stretch the pia mater of the general practitioner; hence he was but a "wall flower" in the open discussion—a condition not conducive to further attendance.

5. Surgical topics have almost monopolized the county society as they have already done the state meeting and the medical journals, and the general practitioner has felt the innuendo that he and his interests were being regarded as inconsequential. Not that the internalist can know too much surgery, for the crying need is for the g. p. (meaning here both general practitioner and general public) to recognize when a condition is strictly a surgical disease, but they must know how to fight out a case of typhoid fever, be ever resourceful and hopeful, and never capitulating.

The average physician, among whom I proudly class myself, has looked for a Moses to free him from the bondage of the overzealous surgeon and specialist, and has found a deliverer in this carefully planned course of postgraduate study which re-enthrones the internalist and gives to medical diseases attention commensurate with the broad field which they occupy.

The much villified *Medical Brief*, although its pages are dedicated to mediocrity and unreason, is commendable (the which is attested by its myriad readers) because it treats of the common every-day diseases. Discuss the same topic of pneumonia, puerperal eclampsia, miscarriage, etc., sanely and helpfully in society meetings, in reputable journals, and these same readers will give you their attention. They do not want to know *less* of Nemo's technic in gastrojejunostomy, but they do want to know *more* of when and how to use strychnia in treating pneumonia.

The postgraduate course of study meets the above mentioned objections (1) by necessitating weekly meetings; (2) by supplying a systematic four years' program instead of a haphazard one made out the first of the year and marked "subjects to be announced later;" (3) by insuring a well-balanced program, boxing the compass of the specialties, giving each its dues, but never magnifying one at the expense of the other; (4) by adding the impetus of providing something for each member to do each week in studying the lesson, and after that he will take pride in being at the meeting because he is well informed; (5) by vitalizing the county society through more direct support and supervision of the great American Medical Association.

En passant it might be noted that the old rule requiring the previous reading at the county society before papers could properly appear before the state association must of necessity be abrogated. This does not mean that written papers should be declared obsolete, for in no other way can medical knowledge be collected for present use and for future reference. The district societies and the state meeting, however, furnish sufficient opportunity for all such essays.

The master minds in the medical profession see in this movement a solution to the immense problem of the continuous education of the general practitioner. While the advance work of some of the county societies is putting Indiana at the front in this campaign, yet at present barely one-fifth of the county societies in the state have adopted the postgraduate course of study. From this progressive fraction comes a message to the remaining four-fifths who are still undecided: this plan eliminates the dry, tedious paper, the horn-blowing, self-exploiting paper, the paper on an irrelevant and uninteresting subject, and substitutes systematic study, short verbal lectures on topics of daily importance, laboratory demonstrations, and is to be commended as more nearly approaching the ideal scheme for small groups of closely associated men such as constitute the county societies.

CHARLES N. COMBS.

THE OPTOMETRY LAW.

INDIANAPOLIS, April 1, 1908.

Editor The Journal:—The article in the March number of THE JOURNAL by Dr. F. C. Heath upon "Eye-strain and Who Should Treat It" will bear careful reading. We have in this state, as a by-product of recent legislative action, an absurd law placing opticians in the same class as regularly educated physicians and conferring upon them all the privileges in certain lines of practice secured by the medical profession only after a four years' course supplemented by a state examination. The law provides for a so-called "Board of Optometry," which shall examine opticians and issue a license, in the name of the state, to those deemed worthy to practice ophthalmology in so far as it concerns the employment of glasses to relieve ocular symptoms. Nothing in the law refers in any manner to what has heretofore been regarded as peculiarly within the province of the optician, namely, the proper grinding and adjusting of lenses, but the whole trend is to encourage and legalize the practice of one of the most important and difficult departments of ophthalmology by those who are

totally ignorant of the first principles of medicine. This is clearly in conflict with the intent of the act governing the practice of medicine and should be taken up by the profession with a view to securing its complete repeal at the next session of the legislature.

The passage of the optometry bill was due to the fact that the profession was not aware of the introduction of such a bill in the House (where it was watched over by a paid attorney) until too late to make an organized effort for its defeat, and furnishes an added reason for the appointment of a committee by the state society to keep watch during sessions of the legislature for bills inimicable to medical education. The arguments which were convincing to members of the legislature were as follows:

First, glasses are solely used for the purpose of improving failing vision, and no possible harm could come from permitting persons possessing sufficient knowledge and dexterity to so adjust glasses as to make vision clear and distinct from prescribing and selling such lenses. Second, by forcing each optician to have a permanent location the state would be rid of the traveling opticians and the worth and dignity of the "profession" would be raised.

It is easy to see how this at once appealed to the lay mind. It did not occur to the unprofessional mind that many if not most cases coming under the care of the ophthalmologists for the relief of errors of refraction come not because of failing vision but because of some discomfort or disease. Now what has been the result? It is true that a few traveling opticians and dealers in glasses in the smaller villages have been deprived of their means of support and their trade diverted elsewhere, but has the public been benefited? Most assuredly "no." It is a rule of constant application that when one must depend upon his own knowledge for his personal security he is alert, but with the multiplication of supposed safeguards this alertness gives way to a feeling of false security with the most disastrous results. As long as the optician, jeweler and peddler sold glasses they were taken at their proper value, and each patron knowing the limitation of their knowledge acted accordingly, and using his better judgment in case of doubt sought the proper skilled medical advice. But now the state proclaims officially by the grant of a license that the skill and knowledge possessed by the optician represents the highest skill and knowledge obtainable in the state in that branch of ophthalmology devoted to the treatment of disease by glasses. To the mind of the writer this is the most dangerous phase of the whole matter,

and the license to "practice" hung upon the walls of shops will eventually be productive of more harm than the justly dreaded ophthalmia neonatorum.

The layman may well inquire where, indeed, is there a "doctor" so trusted by the state that she feels warranted in giving a specific license to practice ophthalmology? To those of us who know how completely the public accepts the government stamp certifying to the purity of foods it will be easy to predict the result of this official misbranding. That this is not a fanciful conception of the matter is borne out by the subjoined account of a few very recent experiences of the writer, who in each instance was assured by the victim that he had not been treated by "a common doctor" but by a skilled "oculist" as attested by the "diploma" in his store. A recital of a few cases will illustrate the point. One case of glaucoma and two of optic neuritis passing into complete blindness, and two more of chorioiditis with seriously damaged vision, all treated with a promise of cure by "optometrical experts" with glasses. It may be of interest to know that one of the most ardent advocates of the optometrical law had for months a display of nostrums for the treatment of eyes in his show window. Within the last twenty-four hours the writer has had the following instructive and at the same time amusing experience: A lady from a neighboring town brought her little daughter for consultation. The child was wearing glasses fitted, according to the statement of the mother, by a most skilled "oculist" of her town. She was quite alarmed at one statement of the "oculist," however, to the effect that the left eye was the seat of a "spot" which was rapidly approaching the pupil and would cover it in time if not arrested, but, thanks to Providence, she had sought consultation in time and the glasses prescribed would prove the salvation of the child.

No trace of a spot could be found, but the mother insisted she had seen a white triangular spot over the pupil but a few days since. While debating the matter the child suddenly pointed to my ophthalmometer and exclaimed, "There is an instrument exactly like the one the doctor used on me." Further inquiry showed the child to have been placed in front of the instrument while the "oculist" and the mother looking down the barrel discovered the white spot on the cornea, which, it is needless to say, was the reflection of one of the mires of the apparatus.

Since the passage of the "optometrical law" even the language of the "optometrical expert" has changed. He no longer has "customers" but "patients." Yesterday I received a polite note

from one of these "experts" to the effect that I had some months previously fitted a "patient" of his and that the said "patient" was again complaining and that he (the "expert") had discovered I had made a mistake and suggested I give my consent to having the glasses changed to meet his measurements.

As a startling example of the operation of the law in elevating the tone of the "profession" I quote the following literally as given me by one of the leading practitioners of the state referring to a licensed "expert" in one of the large county seats. "T— C—, pauper, drunkard and vagabond of the town of S—, inmate of the county infirmary, peddles spectacles at times."

At present "Doctors of Optics" are multiplying with startling rapidity, and Chicago seems to be the center from which the supply is being sent over the country. It is becoming a difficult matter for a young man to spend a week in the "Windy City" without returning as a "Bachelor of Tonsorial Art" or a "Doctor of Optics."

It certainly is time for the profession to take up a vigorous and systematic fight for the repeal of this vicious law, especially as a circular has recently been issued by the Optical Society of the State of Indiana, calling attention to the work of the committee of the A. M. A., headed by Dr. Lucien Howe, and urging its members to unite not only to prevent the repeal, but to strengthen the law which is now being menaced by the medical profession. In my judgment, the fight for repeal should not be left to a general committee of the state society, but should be taken up by the oculists themselves, as they are the ones best fitted to furnish data necessary to educate the lay members of the legislature. By concerted and sustained action on the part of the oculists of the State, contributing necessary funds for legitimate expenses, keeping careful records of cases treated by these "experts," together with the results, and holding to a campaign of education, I feel there will be little doubt of the outcome.

FRANK A. MORRISON.

DEATHS

DR. J. N. DENNY died Saturday morning, March 28, at his home in Ligonier, aged 73 years.

JAMES S. ALSORD, M.D., a graduate of Rush Medical College, Chicago, 1878, died at his home in Zionsville, Ind., February 26, aged 60.

DR. AMOS C. JACKSON, one of the oldest pioneer physicians in Elkhart County, died at his home in Goshen, March 19, after an illness of one week's duration.

JOHN M. NICKLES, M.D., died at his home in Sellersburg, March 12, from cancer of the stomach, aged 60. He graduated from the University of Louisville, Medical Department, in 1876.

HENDERSON D. DAVENPORT, M.D., a veteran of the Civil War, died at his home in Sheridan, March 12, from intestinal paralysis, aged 62. He graduated from Indiana Medical College, Indianapolis, in 1872.

JAMES S. McMURRAY, M.D., a graduate of Medical College of Indiana, Indianapolis, 1870, 25, from acute nephritis, following an attack of died at his home in Frankfort, Ind., February erysipelas.

JULIUS E. BARBOUR, M.D., died at his home in Bristol, Ind., February 17, from pneumonia, after an illness of three days, aged 61. He graduated from the Cleveland (Ohio) University of Medicine and Surgery in 1878.

WILLIAM ASBURY HORRALL, an eclectic practitioner of Washington, Ind., a veteran of the Civil War, and for eight years postmaster, died at the home of his daughter in Indianapolis, March 9, from influenza, after an illness of seventeen days, aged 89.

DR. HENRY A. MUMAW, one of Elkhart's oldest physicians, died at his home Wednesday morning, April 1, of Bright's disease, at the age of 58 years. He graduated from the Hahnemann Medical College, Chicago, in February, 1886.

DR. THOMAS J. ADAMS, of Danville, died Friday morning, March 13, aged 70 years. He received an academic education at Thorntown, Ind., and began the study of medicine with Dr. Lockheart, of Danville. He served as hospital steward and assistant surgeon in his regiment in the Civil War. After the war he attended Rush Medical College, graduating in 1870.

AFTER an illness of several years, incident to old age, Dr. Vernon Gould died at the home of his son, Dr. Charles Gould, of Rochester, Tuesday, March 17. Early in life he adopted medicine as his profession, graduating from Rush Medical College in 1855. The remainder of his life was spent in active practice, excepting three years spent in the service of his country as as-

sistant surgeon of the Eighty-seventh Regiment.

DR. JOHN FITZGIBBON, one of the last physicians of the old school, died at his home in Washington, March 30, from an attack of heart failure which was aggravated by an acute attack of erysipelas. He came to this country from Ireland when a young man and opened an office in Louisville, where he practiced medicine until May, 1865, when he came to Washington. While in Louisville he was a surgeon in one of the union hospitals.

PERSONALS

DR. JOSEPH SAUNDERS, of Anderson, is very ill with paralysis.

DR. S. B. ELROD, of Raglesville, has removed to Henryville, Clark County.

DR. FRANKLIN W. HAYS, of Indianapolis, is reported to be critically ill in Los Angeles.

DR. H. R. ALLEN, of Indianapolis, spent the month of March in a cruise to South America.

DR. M. W. ROTHROCK, formerly of Tell City, is now located at Howell, Vanderburgh County.

DR. A. B. KNAPP, of Washington, has returned home after spending the winter in Texas.

DR. THEODORE F. SEYMOUR has been appointed secretary of the Mishawaka Board of Health.

PROFESSOR H. SNELLEN, the world-renowned ophthalmic surgeon, died at Utrecht, January 18, aged 73.

DR. W. T. LAWSON, secretary of the Hendricks County Medical Society, has been on the sick list for several weeks.

DR. A. F. TULLY and wife, of Brazil, Ind., are spending a few weeks visiting at Hot Springs and other points in the South.

DR. M. J. COMPTON, of Evansville, was appointed by Dr. H. C. Sharp, of Jeffersonville, on the auxiliary legislation committee.

DR. W. S. SHAFFER, of Rochester, has been confined to his bed for several weeks with gastric ulcer and an hypertrophied heart. He contemplates, as soon as he is able, to spend the summer in travel.

DR. BURTON D. MYERS and DR. J. H. FORD addressed the Putnam County Medical Society at Greencastle the latter part of February.

DR. L. C. CLINE and wife, of Indianapolis, are making a tour of the world. Dr. Cline expects to be back some time in the early summer.

DR. J. F. BENHAM, former professor of materia medica in the Central College of Physicians and Surgeons, is now located at Hardesty, Okla.

DR. P. Y. MCCOY, of Evansville, who has been suffering for several weeks with influenza, spent the month of February in Point Christian, Miss.

MRS. EMMA E. DRYER, wife of Dr. D. W. Dryer, of LaGrange, died at her home Thursday, March 5. Through error the March JOURNAL gave the date of her death as March 6.

DR. C. H. WHITE, president of the Owen County Medical Society, and formerly of Catawact, has located at Danville, where he has entered into partnership with Dr. Charles A. White.

DR. CHAS. L. WRIGHT, secretary of the Huntington County Board of Health, who has recently undergone an operation for gallstones in Chicago, has so far recovered that he is again able to take up his practice.

DR. NELSON D. BRAYTON, one of the government physicians at Ancon Hospital, Panama, who has been visiting his parents, Dr. and Mrs. A. W. Brayton, of Indianapolis, during his vacation, returned to the Isthmus early in April for a short period, after which he will again practice his profession in Indianapolis.

DR. U. H. HOLDER, of Washington, who lost his sight last winter as the result of an attack of la grippe, was nominated for coroner at the Republican county convention held on Wednesday, March 25. He is assured of election, as the Democrats previously decided to have no candidate in case of his nomination.

DR. J. W. BATES, of Broad Ripple, celebrated the twenty-fifth anniversary of his entrance into the practice of medicine Thursday evening, April 2, 1908, with a "Doctors' Dinner," attended by Drs. M. V. B. Newcomer of Tipton, J. V. Bower of Millersville, K. C. Hershey and F. C. Hershey of Carmel, T. N. Bennett of Broad Ripple, G. V. Woolen, O. G. Pfaff, T. W. DeHass, G. H. F. House, J. F. Barnhill, S. P. Scherer and F. C.

Heath of Indianapolis, and a few other personal friends. A beautiful silver candelabra was presented to the Doctor by Mr. H. E. Zimmer, of Indianapolis, on behalf of the guests.

NEWS, NOTES AND COMMENTS

FIFTY thousand dollars has been subscribed for a tuberculosis hospital at Seattle.

MRS. LILLIAN EGOLF, wife of Dr. H. M. Egolf, of Liberty, Ind., died at her home Feb. 21, 1908.

THE Thirteenth District Medical Society will hold its next meeting at Knox, Ind., on May 6.

MARRIED, on Friday, March 27, at Shelbyville, Dr. David E. Johnston and Miss Clara B. Bigney, both of Moores Hill.

THE next meeting of the Twelfth Councilor District Medical Society will be held in Fort Wayne on Tuesday, April 21, 1908.

THE next meeting of the Eleventh Councilor District Medical Society will be held in Logansport on Wednesday, April 29, 1908.

THE doctors of Wells County have resolved not to permit their names to go into the newspapers in connection with any cases they may be treating.

THE Canadian government has been asked that the grant for the maintenance of consumptive patients be increased from \$1.50 to \$5.00 per week.

CHICAGO physicians are investigating affairs as pertain to the administration of state institutions, with the idea of offering recommendations for improvement.

THE Rochester Postgraduate Medical School, after a few weeks of rest owing to the busy season, has renewed its regular weekly meetings with a full membership and doubly increased interest.

THE GOVERNOR of Maryland, on March 26, signed the bill abolishing the practice of "Christian Science" in Maryland. By the provisions of this bill it is made illegal for Eddyites to treat the sick by their methods if they make a charge for their services. — *Journal of the American Medical Association*.

A PROPOSITION is before the New York Legislature for the establishment of another home for crippled children. The state has a home for crippled children which already has more applicants than it can accommodate.

NEW YORK CITY has opened a day school for deaf-mutes with accommodations for 250 pupils. There are classes for crippled children and 50 classes for mentally defective children, but as yet nothing has been done for the blind.

THE commission of Portuguese residents of Rio Janeiro, which has been collecting funds for the reception of King Carlos of Portugal, has determined to appropriate this money for the erection of a tuberculosis sanitarium to be called after Queen Amelia.

NEGRO cocaine sellers are being prosecuted in the city of Baltimore. It has been discovered that quite a traffic is being carried on among members of the colored race, and the authorities are attempting to put a stop to the practice.

IN Boston sellers of catarrh cures containing cocaine are also being prosecuted and a number of convictions have been effected.

THE physicians of Evansville, Ind., have been invited to address the grade and grammar schools of the city on "The Laws of Health." It is hoped by the school board that a number of local physicians will volunteer enough of their time and talent to give the pupils valuable information. The board realizes that through the scholars the homes can be reached.—*The Lancet-Clinic*.

THE city board of health of Fort Wayne has made the announcement that in future all plans and specifications for school buildings to be erected within the city must first have the approval of the board of health before any work can be done toward their construction. This is for the purpose of determining that the building will be fireproof, sanitary in every particular, and perfectly lighted, heated and ventilated.

IN September, 1908, a cancer exhibition is to be held in Brussels in connection with the Second International Surgical Congress. The exposition is to comprise exhibits of all sorts relative to the nature, occurrence, investigation and treatment of malignant new growths, and will be under the direction of the general secretary of the Surgical Congress, Professor Denage, of Brussels.—*Medical Review of Reviews*.

A BILL has been introduced in Congress authorizing the creation of a tuberculosis fund of \$600,000 to be disbursed by the secretary of the treasury for employing experts to inquire into the methods of treating tuberculosis and to investigate all questions relating to said methods and the development and improvement of said methods with a view to ascertaining and publishing the best available methods of treatment for the disease.

THE professional man who shows no interest in the organized work of his profession is looked upon by every intelligent person as a man who either regards himself as superior to his fellows or who is afraid to meet them and discuss professional subjects with them. We believe this to be a true and just estimate, and the burden of proof to the contrary falls upon the man who always stays away from such meetings.—*Jour. Minn. State Med. Assoc.*

WE are professional men in every sense of the word; we have the mental labor of lawyers, the moral standing of ministers, the technical knowledge of organized artisans, and the business qualifications of school children. The average man will give a lawyer \$300 to \$500, together with a lifetime's praise, to keep him out of the penitentiary for from two to ten years, and at the same time he will raise a phosphorescent glow and a kick that can be heard around the world if a doctor charges him \$50 to \$100 to keep him out of hell for a lifetime.—*Texas State Journal*.

THE Semi-annual Convention of the Indiana State Nurses' Association was held in the assembly room of the courthouse at Fort Wayne March 27 and 28. The program for Friday afternoon was as follows: Invocation, Rev. Rowand; address of welcome by Dr. M. F. Porter. In response Miss Edith Favorite presented a paper on the subject "Hospital Nursing;" Dr. Otto Gross followed with a paper on "The Prescriptionist" and "What Work Shall the State Societies Do After Registration Is Secured" was discussed by Miss Isabel McIsaac. Saturday forenoon a medical clinic, conducted by Dr. Charles Beall, was held at the Indiana School for Feeble-minded Youth. Luncheon was served by the Hope Hospital Alumni at 12:30. The afternoon session was taken up with papers by O. E. Mohler on "Associated Charity Work"; "What Some Women Are Doing," by Miss Johnson; "Alumnæ Work," Miss L. Garrard; "Suggestions from a Private Nurse," Miss Elizabeth Bell, and Question Drawer, conducted by Mrs. E. G. Fournier.

SOCIETY PROCEEDINGS

THE COUNCIL.

A special meeting of the Council of the Indiana State Medical Association was held in Indianapolis March 23, 1908. Councilors Davidson, Leach, Stemm, Weinstein, Stevenson, Wishard, Kemper, McCully, Bulson and Daugherty were present.

Frederick R. Green, assistant secretary of the American Medical Association, was present by special invitation, to offer for acceptance by the Council a plan for medical organization work in Indiana whereby the state will be canvassed by specially trained organizers from the A. M. A., who are given authority to solicit members for the county, state and national medical organizations. Dr. Green stated that it was the purpose of the organization committee of the A. M. A. to more thoroughly organize the medical profession in all the states, and it was thought advisable to have the organizers for the national association work in conjunction and under the direction of the various state organizations, thereby accomplishing results for county and state societies, while at the same time accomplishing results for the A. M. A. The canvassers are to interview all doctors who are pronounced by county societies as eligible to membership in the county societies, with a view to securing application for membership and explaining the benefits to be derived by affiliation in medical societies. Applications for membership in county societies are not to be solicited from physicians who have not been declared eligible and worthy of membership in the county organizations. The salaries and expenses of the canvassers are to be paid by the A. M. A., but for all new members secured by the canvassers, and whose applications have been favorably voted upon by the county societies, compensation is to be paid to the canvassers by the state association.

Following an extended discussion of the proposition as offered, the Council, by a unanimous vote, decided to accept the offer of the A. M. A., it being understood that the canvassers while working in Indiana are to work under the advice of the Council officers of the various county organizations, and that no financial obligation be assumed other than required in the payment of \$1 for each new member secured for the state association, and that such compensation be not paid until after the new member has been duly credited with membership and his dues paid into the state association treasury.

Dr. Green advised the Council that several canvassers would be placed in Indiana within a few weeks and that prior to starting the canvassers to work it would be necessary for county society officers to assist in the preparation of complete lists of the physicians in the several counties, designating those physicians who are members of county societies, those who are not members but eligible, and those who are not members and not eligible.

Following a rather general discussion of the organization work in Indiana and a report of councilors as to what has been accomplished since the last meeting, the meeting adjourned.

ALBERT E. BULSON, JR., Sec.

"FRUITOLA," a fake remedy for gallstones, received attention in the Department of Pharmacology of *The Journal* of the A. M. A. of March 14. The remedy is a patent medicine which is alleged to have the wonderful power of relieving appendicitis or any intestinal inflammation without an operation. It is also said to be a system cleanser, to remove gallstones, and to cure all stomach trouble. It has been discovered that identically the same results are secured with large doses (2 oz.) of olive oil. When olive oil was suggested for the treatment of gallstone colic it was noticed repeatedly that after its administration the patient passed a considerable number of small lumps which were supposed to be gallstones, but chemical examination of these concretions showed that they mainly consisted of soap which had been produced by the digestion of the oil. This observation has since been made use of by nostrum manufacturers to convince physicians and their patients of the efficiency of their preparations in securing the expulsion of gallstones. A simple examination will usually show the true nature of these bodies since they disintegrate readily when stirred in water. They consist of fecal matter mixed with the mass of soap.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION very properly answers the question, "Shall we charge clergymen?" in the affirmative. The pernicious habit of giving gratuitous service to members of the cloth is robbing the medical profession of its just dues, and, in addition, robs the former of their self-respect. Even should the clergyman charge the physician no fee for marriage services or for baptismal ceremonies, etc., which fee he is always extremely careful to accept, there is something particularly humiliating in the idea that the clergyman expects and ought to receive our best attentions gratuitously. He usually receives a large salary, pays no rent, is entertained at dinners innumerable, and yet has the consummate self-assurance of expecting medical services free. It is to be hoped that a clergyman will soon be treated in this respect no differently from persons in other walks of life. He is no pauper, although if he is in needy circumstances a reduction in the fee may be made. We ought to exact a fair remuneration from everyone who is the recipient of our ministrations. It is fair, it is honorable, it is just. And if the clergymen really desire to increase the respect accorded them, which in this day and generation is not as marked as in the times of our grandfathers, then they will hasten to voluntarily offer to pay for value received. —*The Lancet-Clinic*.

ADAMS COUNTY.

The regular meeting of the Adams County Medical Society was held March 13, at the office of Dr. P. B. Thomas of Decatur. Meeting was called to order by President Costello, with a good attendance. Minutes of February meeting read and approved. The name of Dr. C. C. Rayl of Monroe was presented for membership, and as the board of censors reported favorably he was unanimously elected to membership. Dr. C. T. Rainier, a retired practitioner living in Decatur, was present by invitation, and was made an honorary member of the society.

The paper of the evening was by Dr. M. F. Parrish, of Monroe, on the subject, "General Pathology," and was greatly appreciated by the members who tendered him a vote of thanks.

The next meeting of the society will be held in April at the office of Dr. Keller, when Dr. P. B. Thomas will read a paper on "The Anatomy of the Abdomen," and Dr. McMillen will present the subject, "Diseases of the Abdomen."

Adjourned.

MARIE L. HOLLOWAY, Sec.

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of Feb. 18, 1908.)

Society called to order by President Calvin, with eighteen members and guests present. Minutes of previous meeting read and approved. The regular post-graduate program was taken up.

Probability of Recurrence in Carcinoma and Sarcoma was the title of a paper by Dr. B. P. Weaver, in which he summarized as follows:

First.—The present chaotic state of our knowledge concerning the etiology of malignant disease greatly militates against accurate prognosis.

Second.—The only criterion of cure lies in the autopsy.

Third.—The three year limit is entirely inadequate to the proper estimation of the frequency of recurrence, from 2 to 20 per cent. of recurrent carcinomata recurring after this time.

Fourth.—The prognosis as to life and as to recurrence depends upon certain well-established factors, among which are the duration of the disease, the character or relative malignancy of the tumor, or, as Jacobson says, "the virulence of the infection, the location and extent of the existing involvement, the period of life at which the disease appears and the completeness of the operation as well as the caution with which it is executed."

Gross and microscopic specimens of carcinoma and sarcoma were exhibited. Among these was a case of secondary carcinoma of the heart; specimens showing regenerative recurrence following the second and third operations in cancer of the breast; specimens showing a recurrence in a liver twenty months after operation for melanosaemia of the choroid. (At autopsy the liver weighed 19 pounds.)

Dr. Rhamy opened the discussion by saying that we must not lose sight of the fact that some of these supposed recurrences, after years, are probably new cancers. He thinks that six years is the extreme limit that should be regarded as for recurrence to happen in.

Dr. Porter said that it sometimes seems that it is more probable that these manifestations occurring eight to ten years after operation for cancer are cancers that these patients would have had anyway. In

this connection he reported a case of cancer of the left lung with death six years after an operation on the right breast for cancer. There was no local recurrence at all. He said that if the growth occurs in the scar or in the lymphatics tributary to the space in which the operation is made, then we may regard the tumor as one of recurrence. In cases where the growth occurs in organs having a capsule, and the organ and the capsule is removed entire, there is less likelihood of recurrence. Every now and then cases undergo spontaneous cure. These are rare but they do occur. There is always a question as to what constitutes an early operation for sarcoma. Generally speaking, an early operation may be considered as one that results in a cure. In the upper inner hemisphere of the breast a malignant growth is more likely to recur. With reference to late operations, Dr. Porter said that they are worth doing from the humane standpoint. He said that he had seen cases bedridden from sepsis get symptomatically well for a period as much as two years following operation, and when these patients do finally die they die a very much less unpleasant death than if allowed to go on without palliative operation. The late operation always gives hope to the patient, and to put some hope into a hopeless case is doing something.

Dr. C. E. Barnett said that prostatotomy rather than prostatectomy should be the operation in case of cancer of the prostate.

Dr. Weaver, in closing, said that recurrence may be a true recurrence, as cells which have laid dormant for years, under some stimulus may suddenly become active. Apparently hopeless cases sometimes get well, and they should be given the benefit of an operation. In operating for malignancy the incision should be wide of the involved area, and the surgeon should avoid manipulation.

The application of Dr. K. C. Evans was read and referred to the board of censors. Adjourned.

J. C. WALLACE, Sec.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of March 3, 1908.)

The Fort Wayne Medical Society met in regular session in the assembly room, with thirty-one members present. The president and vice-president being absent, the meeting was called to order by the secretary. On motion, Dr. S. H. Havice was called on to preside. Minutes of previous meeting read and approved. President Dr. W. D. Calvin then arrived and assumed his regular place.

Carcinoma Caused by Gallstones.—Dr. McOscar reported two cases of carcinoma of the gall bladder which had probably originated from gallstones. One was known to have had gallstones eight years and the other ten years. He said that gallstones should not be left to treatment, but should be removed by surgical means as early as possible.

Partial Motor and Sensory Paralysis.—Dr. W. D. Calvin reported case and exhibited patient before society. Patient, Mr. L. E. L., aged 34. Family history: Father living, aged 64, general health good. Mother died at the age of 47, of pulmonary tuberculosis. She had previously been affected with heart trouble. One brother died of diphtheria at the age of 3 years. One brother and one sister living and in good health. Previous health: Patient had typhoid fever at the age of 15 and recovery was uneventful. Has had la grippe several times, but without complications. Was injured when 4 years of age by an axe cut

above right temple. Present condition: In the fall of 1906 patient had light attacks of dizziness on bending over. At such times had frontal and right occipital headaches. He did not suffer from these attacks during the following winter, but they recurred during the spring, summer and fall of 1907. In September and October had swelling one and one-half inches back of right ear, two inches long and one-half inch wide, which was comparatively hard but could be indented. This swelling disappeared of its own accord. Patient's hearing is normal. A pterygium on each eye causes headache on rather moderate use of the eyes, but he detects colors and objects well. Has small goiter. About November 1 had pain in lumbar region, worse at night and upon lifting, at which time he suffered frequent urination both day and night. Seemed to pass a superabundance of dark and cloudy urine, settling a reddish deposit having no special odor. Bowels and stomach have been and are normal, as also are the heart and lungs. About January 20 patient noticed for the first time a numbness of index finger and thumb of right hand, and in about two weeks noticed a tickling sensation in both feet and calves of legs, also a stiffness and clumsiness in such parts, followed in a few weeks with general stiffness of body. Later the left hand also became numb, contractures in both forearms following, which prevented sleeping for more than one or two hours at a time. At the same time contractures began in neck, drawing head backward, which lasted twelve days, being worse at night.

All reflexes are present, but patient suffers from in-co-ordination of the extremities. Has partial motor paralysis and partial tactile paralysis of extremities. The sensation of pin prick is still present, but diminished, and heat sense is present. Can not walk in the dark or with eyes closed. Palms of hands and wrists do not respond to electrical stimuli. Dr. Bulson examined eyes and reported negative findings. Patient was first seen last Friday. His family are of the non-nervous type. He gives no specific history of either family or himself. He feels like he is walking on cotton.

In the discussion Dr. Porter suggested therapeutic test of 100 grs. potassium iodid three times per day. Dr. Drayer suggested that the case be put in hospital for further study and observation. Dr. Beall said the lesion is in the region that takes care of co-ordination.

The Anatomy of the Brain was the title of a very extended lecture by Dr. E. M. Van Buskirk, in which he used a model to demonstrate various parts of the brain.

In the discussion Dr. Porter spoke on paralysis of the facial nerve following operation for removal of fifth nerve. There are only two such cases on record. He mentioned the Krause operation in particular. It is an operation which could by no means touch the seventh nerve after its exit from the stylo-mastoid foramen. He said that one explanation might be that the seventh nerve had an unnatural course. There might also be a connection between the two, or the condition of paralysis might be produced by traction on nerve trunks, as the traction usually made is quite severe with a view to getting well up before dividing. Paralysis of the facial nerve might also be produced through the chorda tympani. It might be that traction severe enough to produce trauma would be sufficient to produce paralysis of the facial nerve, but if it were in the center paralysis would be on the other side. The chorda tympani route is most plausible, and

Dr. Porter says he owes this explanation to Dr. Mouser.

Board of censors reported favorably on application of Dr. K. C. Evans, and motion was made and carried that the by-laws be suspended and the secretary cast the ballot of the society for Dr. Evans.

Motion was made and carried that the chair appoint a committee to report on the advisability of medical inspection of schools.

Motion was made and carried that it is the sense of this society that the commissioners give the use of the lower floor of the court house in the evenings to the public.

Adjourned.

J. C. WALLACE, Sec.

(Meeting of March 10, 1908.)

Fort Wayne Medical Society met in regular session in the assembly room Tuesday evening, March 10, with twenty-three members present. Meeting called to order by President Calvin. Minutes of previous meeting read and approved.

Typical Hereditary Syphilis.—Clinical case report by Dr. Havice. He had been consulted some years ago by lady for supposed malignant condition of nose. Put her on KI, 40 grs. and increased to 60 grs., when she improved rapidly and the lesion healed up. This week she brought two of her children, one being perfectly healthy, the other having a growth under the tongue which occupied the entire floor of mouth. The growth, an enlarged ranula, was opened and cauterized with nitrate of silver. He thinks that perhaps it would have been better to dissect it out.

Dr. McOscar, in opening the discussion, said that the treatment followed by Dr. Havice was the proper course to pursue.

Dr. C. E. Barnett said that unless the secreting surface in these secreting cysts is destroyed they will return. He suggests injecting these cysts with paraffin after aspirating and when the paraffin is hard remove them. Thus you will be sure of removing all the secreting surface.

Physiology of the Brain was the title of a paper by Dr. W. D. Calvin. He quoted authority that you could not count radial pulse with tip of tongue. Different members of the society, after attempting the experiment, concluded that this statement was incorrect.

In the discussion, Dr. Porter, speaking on the sensibility of the abdominal contents, said that if the peritoneum is exposed to the air for a few moments it becomes insensitive. As soon as traction on the mesentery is made pain is produced. In speaking on cerebral cortical motor centers he said that in experiments on pigeons, after the cerebrum has been removed the pigeon has not sense enough to get away and yet looks very wide awake. If the phrenic nerve is destroyed only on one side a person can live. The first, second and third frontal lobes have only to do with higher cerebral functions. Given a man with all the symptoms of brain tumor, minus paralysis such as follows involvement of motor areas, who is gradually losing his mind, and it is more than likely that the lesion is in the front of the ascending convolutions.

Dr. Van Buskirk said the higher you go in the animal kingdom the more the cerebral function is developed. He referred to an experiment on a dog in which the cerebrum was removed, the dog living for more than a year.

Dr. Buchman said the study of this question of the nervous system comes down to a study of the nerve

cell and nerve fiber. If the sense of smell is lost entirely red pepper will taste like sand. He referred to the peculiar condition of a patient of his who had a diabetic condition four or five years ago, and three years after had paresis; finally developing an aphasia and began to get better without treatment. Now he can write a letter, but can't read it after it is written.

Dr. McOsear said he knew of two cases in which there was an entire absence of smell, one of which is congenital, but in both cases the sense of taste is all right.

Dr. C. E. Barnett referred to removal of cerebellum in operation for tumor.

Dr. Weaver said he believed that there is a metabolic function of the brain.

Dr. Nierman said some smells are educated and some are present naturally.

Fractures of Vault of Cranium was the title of a paper by Dr. D. C. Wybourn.

Dr. Bruggeman opened the discussion by saying that the only safe way of differentiating depressed fracture of skull from a hematoma is an incision.

Dr. Porter said that where there is a question the rule should be that exploration be made to determine whether there is an intracranial lesion that needs attention. He spoke on hematoma and depressed fracture.

Dr. Morgan referred to one of his cases in which a young man fell from a height and sustained a fracture of the base of skull about five years ago, from which he recovered. When seen a few weeks ago he complained of great physical weakness and continuous mild headache. He asked whether this condition of physical weakness could be attributed to fracture five years ago.

Drs. Nierman, McOscar and C. E. Barnett also discussed papers.

Motion was made and carried to refer Dr. Nierman's paper on Embryology to the state society.

Motion to refer Dr. Van Burskirk's paper to state society was lost. Opinion was that his and similar papers from post-graduate course would not prove attractive enough for the state society.

Dr. E. J. McOscar brought up the question of enforcing the anti-spitting ordinance.

Dr. M. F. Porter made motion that the secretary be instructed to inform the Board of Public Safety that it is the earnest wish of the members of the Fort Wayne Medical Society that the ordinance referred to be enforced, as we consider it an important ordinance.

Adjourned. J. C. WALLACE, Sec.

(Meeting of March 17, 1908.)

The regular meeting of the Fort Wayne Medical Society was held in the assembly room, with nineteen members present. Society was called to order by President Calvin. Minutes of previous meeting read and approved.

Ruptured Tubal Pregnancy.—Clinical case report by Dr. B. Van Sweringen. Patient, woman, aged 32, in good health, was suddenly seized with pain in the abdomen at 6:30 a. m. When first seen by Dr. Dancer there was pain and tenderness in the right lower abdomen. She had had two children at full term and three miscarriages, the last one year ago in January. Pulse rose rapidly until 4 p. m., when it was 120. Temperature was normal and skin and mucous membrane blanched. Abdomen was opened and tube taken out. Fetus could not be found. She had menstruated the

same as usual February 16. There was no discharge of decidua. The drainage tube was removed Saturday evening.

Dr. Dancer in opening the discussion, said that there was extreme general tenderness of the abdomen, with total absence of rigidity.

Dr. Calvin said that he had seen four cases of ruptured tubal pregnancy, in one of which there was muscular rigidity, due to hemorrhage.

Dr. S. V. Wilking reported case of miscarriage at seven and one-half months. Post-mortem on fetus showed prolapse of third lobe of liver into cord, producing suffocation. Water broke ten days before delivery. He also reported a case of extreme phimosis in a man aged 41 years, and exhibited foreskin which had been removed.

Dr. Calvin gave a further report on nervous case reported some time before. The man is taking 100 grs. KI three times per day, and is not improved. Since then there is a scaling of the hands and papular eruption across the shoulders. He has had these symptoms before. The examination of the eyes was negative.

Dr. B. Van Sweringen said this is a very interesting case, as the rapidity of the paralysis is unusual.

Fractures of Base of Cranium was the title of a paper read by Dr. K. K. Wheelock. The paper was discussed by Drs. Harvice and Nierman.

Adjourned.

J. C. WALLACE, Sec.

Meeting of March 24, 1908.

Meeting called to order by President Calvin, with twenty-seven members present. Minutes of previous meeting read and approved.

Gunshot Injuries of the Head, by Dr. H. A. Duemling. Dr. Duemling said he was unable to get skulls to show exact effects of gunshot injuries so he used cans of baked beans, which he had shot with different kinds of bullets. He said that the soft nosed ball will cause greater destruction. The wound of entrance in the bone is seen by concentric fractures around the point of entrance, and radial fractures due to the elasticity of the skull. The wound of exit is larger than the wound of entrance and is made by ball and pieces of bone carried with it. The ball passes along, taking pieces of bone with it, and bursts the other side out, as it were. The wound on the inner table of the skull is larger at the point of entrance than at the point of exit. He then took up the various points as given in postgraduate program.

Intracranial Hemorrhage was the title of a paper by Dr. L. E. Brown in which he gave in detail the symptoms and manifestations of hemorrhage in various parts of the brain.

Traumatic Meningitis. This subject was taken up by Dr. J. S. Boyers, who gave some of the symptoms.

In the discussion Dr. Buchanan said that the nearer you are to the gun the smaller is the point of entrance. The reason that the point of exit is larger is that the speed of the ball is slackened and it therefore makes a larger wound. Meningeal cry is almost a pathognomonic sign of meningitis.

Dr. Porter said that in a case of meningitis at first there is an over activity of physiologic action of brain function. He said he had never seen a case of traumatic meningitis from contusion of the scalp without the fracture of the skull. He said that the cavities of the nose and ear should be cleansed and kept clean, and precautions taken to exclude the air.

The paper was also discussed by Drs. Van Buskirk, Weaver, Smith, Havice, Dancer and Calvin.

In closing the discussion Dr. Duemling said that the rifling in a gun is to increase the penetrating power. He also said that hydrodynamic force is a living, moving force.

Motion was made and carried that the chair appoint a committee of three to investigate the school buildings in the city of Fort Wayne and report to the society. Drs. Porter, Bulson and Gilpin were appointed.

Adjourned.

J. C. WALLACE, *Sec.*

CLAY COUNTY.

The Clay County Medical Society met in regular session March 19.

Ophthalmia Neonatorum.—Clinical case report by Dr. W. H. Orr of Brazil. Dr. Orr said that the three cases under discussion were successfully treated by him.

Laminectomy.—Case report by Dr. G. W. Finley of Brazil. Patient suffered from traumatic paraplegia for seven years, finally completely recovering.

At the weekly Thursday evening meetings, in addition to following the post-graduate studies, it is planned to give all the members present practical drill in physical diagnosis with the ophthalmoscope, laryngoscope, phonendoscope, sphygmomanometer, etc. It is a source of regret that a larger number of the membership can not attend these weekly study club meetings regularly.

Adjourned.

G. W. FINLEY, *Sec.*

CLINTON COUNTY.

The regular meeting of the Clinton County Medical Society was held at the office of Dr. McCarty, Frankfort, on February 6. The papers of the evening were "Treatment of Pneumonia," by Dr. W. T. S. Dodds, and "Spondylitis," by Dr. David Ross, both of Indianapolis. The papers were freely discussed, particularly the former, since Dr. Dodds advocated the placing of the patient in an unheated room. Dr. M. S. Canfield spoke with reference to the placing of a high license on all "traveling doctors." The local society is trying to get such a license passed by the council.

Adjourned.

A. G. CHITTICK, *Acting Sec.*

DELAWARE COUNTY.

The regular meeting of the Delaware County Medical Society was held March 6, with twenty-three members present. An interesting paper was presented by Dr. C. M. Mix on "Modern Surgical Technic," in which the practical application and history of the microscope, asepsis and antiseptic methods, hemostasis and anesthesia were presented as factors in the attainment of the present high standard of surgery.

The following conclusions were drawn:

That ether is the safest and best anesthetic.

That local anesthesia is advisable when feasible.

That hyoscin-morphin-cactin anesthesia is unsafe.

That asepsis should be as rigid in infected as in clean cases.

Dr. Austin of Anderson, opened the discussion by stating that only relative asepsis can be obtained and is all that is necessary; that infection sometimes occurs from the use of too highly sterilized cat-gut. In cleansing the hands, preparatory for operating, thorough scrubbing with soap and water for fifteen minutes suffices. In the preparation of abdominal

cases excessive scrubbing is to be deprecated. He has used hyoscin-morphin-cactin anesthesia and only with good results. Has never used more than two tablets in one case, and follows the same by the administration of some chloroform, of which he has never used more than 2½ drams, and usually much less.

Adjourned.

H. S. BOWLES, *Sec.*

ELKHART COUNTY.

The Elkhart County Medical Society met in regular session March 5 with a good attendance. Minutes of previous meeting were read and approved. Dr. Frank Randolph presented a paper on the "Accessory Sinuses of the Nose," giving a review of the history of the frontal, ethmoid and maxillary sinuses, and showing a number of specimens. The second paper of the evening was by Dr. A. A. Norris on "Arteriosclerosis." In reviewing the subject he recommended iodine as a medicine especially beneficial in the treatment.

The society held its special annual meeting in Goshen, March 26. A banquet was tendered to all the visiting physicians.

Adjourned.

GEORGE W. SPOHN, *Sec.*

FIFTH DISTRICT MEDICAL SOCIETY.

Fifty members of the county medical societies in the Fifth District (Vigo, Parke, Vermilion, Clay and Putnam), met at Terre Haute March 11, 1908, and organized the Fifth Councilor District Medical Society. The meeting was called to order at 1:30 p. m. by Temporary Chairman Dr. Joseph H. Weinstein. Dr. F. H. Jeet acted as temporary secretary. A constitution and by-laws were adopted and the following officers elected: President, F. C. Dilley, Brazil; first vice president, Eugene Hawkins, Greencastle; second vice president, C. M. White, Clinton; treasurer, M. A. Boor, Terre Haute; secretary, J. R. Gillum, Terre Haute; committee on scientific work, Drs. Mattox, Combs and Gillum; committee on public policy, Drs. Keyes, Findley and King.

Adjourned.

J. R. GILLUM, *Sec.*

FRANKLIN COUNTY.

At a recent meeting the Franklin County Medical Society was reorganized and the following officers elected: President, E. L. Patterson, Brookville; vice-president, C. W. Carter, Brookville; secretary-treasurer, C. H. Mayfield, Brookville; censors, Phillip L. Mull, Oldenburg; J. F. West, Brookville and Henry Gregory, Laurel. In addition to the officers named the membership is made up of the following: Chas. W. Stolzer, A. W. Vogt, I. D. Garrigues, A. L. Preston, G. H. Warne and J. C. Claussen. The councilor for the district, Dr. David W. Stevenson, of Richmond, was present at the reorganization.

C. H. MAYFIELD, *Sec.*

GIBSON COUNTY.

The regular meeting of the Gibson County Medical Society was held at Princeton, Friday, March 27. The papers of the evening were as follows: "Anatomy and Physiology of the Ear," by Dr. F. M. Payne, Princeton; "Acute Otitis Media, Symptoms, Diagnosis and Treatment," by Dr. T. Wertz, Princeton; "Concussion of the Brain; Differential Diagnosis and Surgical Treatment," by Dr. R. S. Anderson, Princeton; "Meningitis,"

by Dr. W. G. Hopkins, Fort Branch. At the close of the meeting a lunch was enjoyed.

Adjourned.

A. L. ZILIAK, *Sec.*

GRANT COUNTY.

At the meeting of the Grant County Medical Society, held March 24, the committee on public health and legislation were instructed to investigate all who seemed to be practicing medicine unlawfully. If every society would wage war on these pretenders they could be driven from the state. The society is beginning a crusade against tuberculosis. The records of the city of Marion show that tuberculosis in the last ten years has caused more deaths than smallpox, scarlet fever, diphtheria, cancer and typhoid fever combined.

Dr. D. A. Holliday read a paper on pneumonia which brought out a spirited discussion. Every one present who had had the disease were strong advocates of fresh, cold air.

Adjourned.

O. W. McQUOWN, *Sec.*

GREENE COUNTY.

The Greene County Medical Society met in regular session at Switz City March 12. Dr. W. H. Beatty presented an interesting and instructive paper on "Epidemic Cerebrospinal Meningitis." Dr. Bruce Fleetwood, of Linton, was expelled from the society for making examinations for old line insurance companies for less than \$5.00, which is contrary to a rule of the society.

Adjourned.

F. A. VAN SANDT, *Sec.*

HUNTINGTON COUNTY.

The regular meeting of the Huntington County Medical Society was held at Huntington, March 10. Dr. F. B. Morgan read a very interesting and instructive paper on "Pulse and Tongue as Factors in Diagnosis and Treatment of Disease." Dr. Olive O. Nelson read a paper on "Postpartum Hemorrhage." Both papers merited and received extended discussion.

Dr. S. V. Wilking reported the death of an infant at birth, the autopsy showing the central lobe of the liver within the umbilical cord, thus obstructing free circulation. This explanation was offered as the cause of death. Dr. Wilking presented the specimen for inspection.

At the last meeting of the common council of Huntington, an ordinance was passed imposing a licensing fee of \$50 per day upon all itinerant physicians visiting Huntington. It is thought that the proper enforcement of this ordinance will effectually drive out the traveling quacks and medical fakers who regularly come here for the purpose of humbugging the credulous sick. One Fort Wayne doctor, who had been in the habit of coming to Huntington every month, without any fear of molestation, has paid the license once and not returned since, neither have his advertisements appeared lately in the local papers. If like action were taken by the various county secretaries to influence proper legislation in this direction the days of the traveling quack would be numbered.

Adjourned.

M. H. KREBS, *Sec.*

LAKE COUNTY.

The regular meeting of the Lake County Medical Society was held at Hammond on March 5, 1908, with

twenty-one members and guests present. Dr. Heman Spaulding, secretary of the Board of Health of Chicago, gave an address on "The Relation of the Physician to the Local Health Officers." He said that the object of the health office is to put into practice measures to prevent disease and lessen the death rate. For a health officer to be successful in his work he must have the hearty co-operation of the medical profession and the public. To enlist the co-operation of the public requires an educational campaign conducted through the medium of the public press, women's organizations, etc. The public will appreciate the work of the medical profession to a greater extent if medical men are always accurate in statements made to patients and the public, and if they do not discredit the work of each other. The physician should direct and advise while the health officer must enforce the carrying out of proper suggestions of the medical profession. It is the duty of physicians to promptly report contagious and infectious diseases. With reference to time of raising quarantine the speaker gave the following information: For scarlet fever, four weeks, if the premises are fumigated; measles, three weeks, if the premises are fumigated; diphtheria, two weeks, if the premises are fumigated and two cultures from the patient prove negative; whooping cough, eight weeks. For fumigation the sheet plan is the most practical. Eight ounces of formalin should be used to each 1000 cubic feet of space. For disinfecting excreta $7\frac{1}{2}$ grains of bichlorid of mercury to one pint of water is sufficient, or the chlorid of lime, if 25 per cent. of chlorin is present, may be mixed with the excreta in order to thoroughly disinfect it. Physicians, when visiting contagious and infectious diseases, should take precautions to prevent the carrying of the disease. Aside from the wearing of a gown, which should be disinfected after leaving the case, the face, hands, hair, beard and nostrils should be wiped with a bichlorid solution, 1 to 5000.

In discussing the address Mayor Becker of Hammond said that new legislation is necessary to more clearly define the powers and duties of health officers. We should also have legislation providing for appropriations for maintaining health offices and enforcing health laws in a suitable manner. The county should do more for the public health and should provide funds for the proper carrying out of health measures. It is easy to suggest what should be done but it is difficult to conduct the work of an efficient health board without suitable funds.

Adjourned.

W. D. WEIS, *Sec.*

MADISON COUNTY.

The Madison County Medical Society met in regular session at the Public Library, Elwood, Ind., on March 24, with a good attendance. The first paper of the evening was presented by Dr. Dorris Meister on "The Young Practitioner." Dr. C. P. Runyon also read a paper on "The Doctor and the Society." and Dr. M. A. Austin presented the subject, "The Economics of a Doctor's Charges." All the papers were well prepared and received extended discussion. The next meeting of the society will be held at Anderson.

At the Anderson-Pendleton section of the post-graduate course, which meets regularly every Tuesday evening, interest is rapidly increasing as a result of the many scientific discussions.

Adjourned.

BENJ. H. COOK, *Sec.*

MARION COUNTY.

THE INDIANAPOLIS MEDICAL SOCIETY.

(Meeting of Feb. 25, 1908.)

The society was called to order by the president, Dr. Wynn. The minutes of the last meeting were read and approved.

The program was a symposium on Exophthalmic Goiter. Dr. J. A. McDonald reviewed the pathology of the disease. Dr. F. Q. Dorsey reviewed the symptomatology and medical treatment of the disease. Dr. J. V. Reed reviewed the surgical treatment of the disease.

The Pathology of Exophthalmic Goiter.—(Synopsis of paper by Dr. J. A. McDonald.) At present the final meeting point of the vast majority of investigators is at the thyroid gland, where are found definite and fairly constant changes which are capable of pretty reasonable interpretation. The reason for these changes and the mode of their production are at present unknown, the principal theories being that it is an idiopathic hypertrophy of the gland, or that the change in gland activity is due to an affection of the central nervous system.

Clinically, it is unimportant whether the syndrome is due to alteration in quantity or quality of the gland secretion, or where this alteration takes place. It is true in the vast majority of cases, that operative removal of the gland dispels the symptoms, and failure to remove the gland is followed by failure in treatment.

Exophthalmic goiter is clinically, pathologically and therapeutically the opposite of myxedema, and the symptom-complex of exophthalmic goiter can be produced by the administration of large doses of thyroid gland or its preparations. The investigations, more particularly of Dean Lewis, Heineck and McCallum, record the following changes in the thyroid:

There is a primary form of the disease in which the goiter and some of the clinical features begin coincidentally, and a secondary form in which an enlargement of the thyroid has already existed, due to simple cystic, adenomatous, interstitial or malignant change, and on any of these may be engrafted the clinical picture of hyperthyroidism.

The gross change may be diffuse, involving the entire gland, or merely in scattered patches; but in either form seems to be fairly constant. The gland is usually, though not always, enlarged; the veins are large and there is hyperemia, though on section the tissue tends to be pale, hard and inelastic, grayish and opaque. It has lost its reddish translucence and is dry and granular rather than glairy and gelatinous, depending upon the amount of colloid remaining.

Microscopically, the change is indistinguishable from the compensatory hypertrophy produced experimentally by means of partial thyroidectomy by Halstead and by Horsley. There is increase of fibrous stroma; the alveoli are no longer rounded and full of colloid, but are very irregular in size and form, and in the central part of each lobule there are large, irregular alveoli sending out diverticuli in every direction, and encroached upon by epithelial projections. The epithelium loses its low, cuboidal form and becomes columnar, so that very little lumen is left, with little colloid. Mitoses are frequent, and in severe cases there is desquamation of epithelium with great swelling and altered staining reaction. The colloid is greatly diminished in severe cases and the amount of colloid is said to bear a fairly constant ratio to the severity of the case.

Other theories of the cause of this disease have had their majority of supporters. The thymus gland has been believed to be the seat of the trouble, as has the sympathetic nervous system, the peripheral nerves and central nervous system, the testiform bodies, the parathyroid glands, the heart, and it has been believed by some that compression at the superior thoracic outlet may cause the symptom complex. Sajous believes the adrenal, thyroid and pituitary glands to be a system whose disturbance may cause the disease.

The ultimate cause of the stimulation of the thyroid gland to hypertrophy in these cases is unknown; there is a frequent history of infectious disease. Cases showing evidence of hypertrophy without clinical symptoms should be given thyroid gland or iodothyron in small doses, which may demonstrate a latent hyperthyroidism.

S. P. Beebe has contributed much valuable work in thyroid physiology and chemistry. He believes the thyroid function to be a detoxicating one, and with Rogers has obtained some very significant results with certain sera.

Exophthalmic Goiter: Symptomatology and Medical Treatment.—(Synopsis of paper by Dr. F. A. Dorsey.) There are three classical cardinal symptoms of exophthalmic goiter—enlargement of the thyroid, the exophthalmos and the tachycardia. Marie adds a fourth, the muscular tremor, and Richardson a fifth, the general nervousness.

Tachycardia is the most constant symptom. Rarely, however, it may be absent. The pulse is usually 110 to 150 per minute. There are many disturbances of the circulatory system. The heart varies in size in most cases, and is dilated in 30 per cent. The right ventricle is especially affected. There may be heart murmurs due even to the excited and accelerated action of the heart. There is increased pulsation of chest, epigastrium and larger vessels. The pulse is small and quick. Edema is present in severe cases.

The thyroid gland is enlarged, though not greatly, in most cases. There is always structural change in the gland. The tumor is vascular and has a palpable systolic expansion. A thrill is often present. All varieties of goiter from cystic to malignant may be associated with Basedow's disease.

The exophthalmos present in most marked cases is absent in one-third of the cases. It is a real protrusion forward of the eyeballs, as distinguished from a widening of the palpebral fissure. It is increased by emotion and excitement. Pupils are usually normal, react to light, but may be dilated or unequal. The exophthalmos may be unilateral.

From the standpoint of diagnosis, the muscular tremor, a rapid rhythmical motion with eight or nine vibrations to the minute, ranks in importance with the rapid heart action and the struma—usually limited to muscles of extremities it may involve the trunk and the whole body tremble. It is increased by excitement. Murray noticed it in 111 out of 120 cases.

The unstableness of the nervous system is very marked. Patients are restless, excitable and easily agitated, rapidly passing from one mood to another. Insomnia is frequent and they may have hallucinations or ideas of persecution. The psychic symptoms become more pronounced and may pass over into actual insanity which is likely to be a depressive mania or paranoiac in type.

Loss of weight is usually marked, and disturbances of digestion common. Vomiting and diarrhea are

present singly or combined, in 50 per cent. of cases. Rarely the appetite may remain good and the patient continue well nourished and even gain in weight. With loss of weight there is atrophy of the muscles and loss of strength.

The skin is smooth and moist, and in 90 per cent. of cases there is marked sweating, accompanied by hot flashes, without any increase in body temperature. Various erythemas and pigmentations of the skin occur in many cases.

There may be dyspnea—usually late, due to cardiac disturbance or anemia. A short, deep nervous cough may be troublesome. The urine shows nothing constant except the total nitrogen content is increased, due to the increased metabolism. Menstruation is usually decreased. The following signs are sometimes an aid to diagnosis: Failure of the upper eyelid to follow the eyeball normally in looking downward (V. Graefe); retraction of the upper lid on straight forward vision, revealing some sclera above the cornea (V. Stellwag, Dalrymple); infrequent and incomplete involuntary winking (V. Stellwag); difficulty of evert-ing the upper lids (Gifford); pigmentation of the upper lids (Jellinek-Rosen); failure of forehead to wrinkle on looking up (Joffroy); epiphora or overflow of tears; tremor of eyeballs; subjective feeling of pressure behind the eyes; abnormal dryness of eye.

The prognosis is uncertain. Some cases run a rapid course, but the general tendency is to a chronic course with periods of temporary improvement. In a few cases the disease subsides gradually of its own accord, but with some symptoms partially remaining and eventually relapsing.

The medical treatment of exophthalmic goiter is not altogether satisfactory. The vast majority of cases improve with rest, which must be both physical and mental. The rest treatment should be given a thorough trial in all cases. Patients should be put to bed in a large, well ventilated cheerful room, with an ice-bag intermittently applied to the præcordia and the goiter. The environment must be restful and the diet nourishing, and pushed to the full digestive and assimilative power of the individual. Galvanism through the goiter is sometimes used and cold salt glows and massage are often beneficial. The neurotic state of each patient must be studied as in neurasthenia.

Many drugs have been used in the treatment of the condition. Arsenic, quinin, strychnia, digitalis, strophanthus, iron, ergot and belladonna are all described as improving the condition. Orthophosphate of soda or potash and phosphoric acid in full doses have given satisfaction. Wm. H. Thompson advises dietetic treatment, rest and intestinal antiseptics on the theory that the disease is a toxemia.

Recently some very favorable reports have been given of success with x-ray treatment. The gland was reduced in size, the nervous symptoms lessened and the patients gained in weight. Climatic change is sometimes of great benefit. Organotherapy in most hands has given no results, and thyroid extract has proven distinctly harmful. Iodin (internally), potassium iodid and iodothylin are all harmful and should not be used. Intraglandular injections have cured, but should not be used because dangerous. Some new preparations have been used which are supposed to have an antitoxic effect. First, those produced from animals from which the thyroid gland has been removed, and, second, those from animals to which normal or pathologic glands have been administered. These in-

clude the milk, either natural or desiccated from thyroidectomized animals; the antithyroidin of Moeblus, the blood serum of thyroidectomized sheep, the thyroidectin, the desiccated blood of thyroidectomized sheep, and the recent serum made by Rogers and Beebe by the use of the nucleo-proteid and thyroglobin from normal and pathologic glands. While the reports of these preparations are favorable, it is too early to even estimate their value, but they are full of promise.

Many cases must be turned over to surgery, but perhaps the greatest number should continue to be treated by the internist, as the general tendency of the disease is toward recovery.

The Surgical Treatment of Exophthalmic Goiter.—Dr. Reed quoted Dr. Barker as saying that surgery could cure almost 100 per cent. of the early cases and 75 per cent. of the advanced cases of exophthalmic goiter. These results are far superior to those obtained by medical treatment. This does not mean, however, that every case should be operated upon as soon as a diagnosis is made, for many cases, especially in young women, do improve or even get well under medical treatment. If after about three months of rest and medical treatment improvement is not marked, operation should be advised. In those secondary forms of Graves' disease, that is in those cases arising from a pre-existing thyroid tumor, operation should always be done, the results in these cases being especially satisfactory. In all cases, before an operation is undertaken, great care should be given to the preparation of the patient by giving her one to two weeks of absolute rest in bed. When this rest and medical treatment is insisted upon the operation is less dangerous and the after results much better.

The choice of an anesthetic is still an open question. Halsted and Kocher use local cocain anesthesia, while the Mayos use ether. With the use of Schleich's sol., a 1 to 2000 cocain, the greater part of the pain can be abolished, there is less troublesome mucus in the throat, the trachea is less easily compressed, and the recurrent laryngeal nerve is more easily avoided.

The operation of choice at the present time is the partial resection of one lobe of the thyroid gland, attempting at the same time to leave an amount of gland equal to the normal. The ligation of the thyroid arteries is only justified as a preliminary procedure in those cases where the symptoms are too severe to warrant resection. In the operation of partial thyroidectomy, the incision most commonly used is the collar incision of Kocher. The gland is exposed by incising its external capsule, and the dissection made between this and the internal capsule. Great care should be taken to keep the wound perfectly free from blood, as it stains the tissues and makes dissection more difficult. As a serious form of tetany follows the removal of the parathyroids, it is important that these structures be saved, and not be removed with the thyroid lobe. In order to do this, the thyroid arteries are ligated, whenever possible, distal to the parathyroid arteries, and the parathyroid bodies dissected from off the gland. Great care should be taken in separating the gland from the trachea not to injure the recurrent laryngeal nerve. It can readily be detected by a change in the patient's voice when it is approached too closely. In closing the wound, drainage is important in order to carry away any thyroid secretion that may flow from the cut surface of the gland. Retention of the secretion leads to acute thyroidism, which may be very dangerous at times. In all cases,

both mild and severe, operation offers a cure in from 75 to 80 per cent. The death rate varies from 2 to 5 per cent, with different operators, deaths being due to the anesthetic, hemorrhage, tetany, acute hyperthyroidism, influenza and pneumonia. The cases that survive operation and are not completely cured, are in the main greatly improved.

DISCUSSION.—Dr. F. F. Hutehins said that the study of this disease is closely related to the study of those other so-called trophic diseases, myxedema, Reynaud's disease, acromegaly, etc. He reviewed the history of the use of thyroid extract and the wonderful effect which it produced in certain forms of insanity on which it was first tried. The most interesting cases of Basedow's disease to him are not the well-marked ones but those that show many of the evidences of hyperthyroidism, but not the typical exophthalmos and glandular enlargement. These individuals show great extremes of activity; some are vigorous and exceedingly active, with marked physical growth; others are dull, apathetic, or just fall short of the normal. Our treatment now is purely empirical because we know so little of the real underlying cause of the glandular hypertrophy and hyperactivity. Not until we have learned more of the true nature of the disease will we develop a more satisfactory treatment. One of the greatest difficulties of the operation on the thyroid is to know just how much of the gland to remove so that the symptoms will be relieved and no harm from lack of secretion follow. He believes that the essential condition is a toxemia and the one greatest object in any line of therapy is elimination.

Dr. R. H. Ritter called attention to the fact that we must distinguish between a hypertrophy and a hyperactivity of the thyroid as the cause of the symptoms in Basedow's disease. It is evidently not simply a hypertrophy since the symptoms develop when there is no palpable enlargement of the gland, and again there may be enormous enlargement of the gland with no symptoms. Another question is as to whether there is a new product thrown into the system by the gland or whether there is simply the increase in the normal secretion. This question seems to be definitely settled by the fact that all the typical symptoms of Basedow's disease may be evoked in some individuals by the administration of thyroid extract made from the normal glands. The disease possesses physiologic as well as clinical interest; one of the interesting facts being that while the rate of the pulse is often greatly increased, the blood pressure is not raised. Cardiac hypertrophy, often present, is most marked in the right ventricle and pulmonary congestion is not infrequent. That many cases in the past have been overlooked is evident to all, and that many cases are even now not recognized can hardly be disputed. This will always be true if the grosser and more glaring lesions such as the exophthalmos and thyroid enlargement are depended upon for a diagnosis. The explanation for lack of palpable or visible hypertrophy of the gland is probably that there takes place the so-called soft enlargement in which the organ is so soft as to make its distinction from the other tissues of the neck difficult, especially if there is much adipose tissue about the neck. There is no one constant or pathognomonic symptom or sign. The speaker has recently seen a case in which he considers the diagnosis positive in which there was neither enlargement of the gland nor protrusion of the eyes. There was, however, tachycardia, extreme nervousness and irritability, transient

capillary congestion of the face and neck, loss of weight, and a history of recent gastrointestinal disorder. The speaker could not agree with the frequently heard discussion of this disease as a toxemia. While it can not be absolutely disproven that a toxemia may have been the original cause of the glandular hyperactivity, still if the symptoms are produced by an increase in the normal thyroid secretion thrown into the circulation, as they seem to be, and this secretion is neither a toxin nor a leucotoxin, there is no basis for calling the condition a toxemia.

Dr. J. W. Sluss called attention to the increasing amount of attention this disease is attracting and the prospect of even more interest in the future. He believes that the disease is increasing in frequency, although it may be that with a greater knowledge of the symptoms more cases are now recognized than formerly. Surgical treatment is to-day as purely empirical as medical, but in the future there is reason to believe that the true nature of the condition will be revealed and a physiologic antidote will be discovered and surgical procedures will be abolished. While there is still some question as to the relative value of medical and surgical treatment, when there are cysts and other anatomical changes in the gland, operation is the only method of treatment to be considered. He emphasized the importance of the parathyroids and the necessity of great care in not injuring nor removing them in an operation. Complete ligation of the thyroid arteries is not justifiable, since it also shuts off the blood supply of the parathyroids. With care during the operation the parathyroid arteries can be left uninjured.

Dr. F. B. Wynn spoke of the treatment of these cases with the x-ray. One case with extreme symptoms preparing to undergo an operation was given five exposures, with complete disappearance of symptoms and perfect health for the past four years. Other cases have shown some improvement, but none have shown so remarkable results as this one. In one other case, after a few exposures, the patient grew rapidly worse, an abscess developed in the gland, and the patient died in almost the condition of acute mania.

Dr. J. R. Eastman spoke of the frequency of goiter in Switzerland and the fact that this enlargement of the gland often disappears when the individual removes to another region. All the symptoms of the disease are aggravated by high altitudes. It is believed by the natives that there are certain springs whose waters produce the condition when drunk and there are others whose waters are curative. He has operated on one case of Basedow's disease and two cases of ordinary goiter. He has seen Kocher and others do these operations under local anesthesia, but believes that this is not usually practicable, at least in this country, since the social conditions and the tractability of patients is not the same. He exhibited Kocher's clamp for seizing the gland and drawing it out during the operation without making much pressure on the organ, and also the grooved director for aid in ligating the many small vessels. The greatest care is taken by Kocher to ligate each vessel as he reaches it in order to make the operation as completely bloodless as possible. There is now almost complete unanimity of opinion as to the relative value of medical and surgical treatment. The palliative operations, such as the ligation of the main arteries, while not often done, are done on special indications.

Dr. A. E. Sterne is still unconvinced that the hyper-

activity of the thyroid is the cause of the symptoms in Basedow's disease. He is unconvinced that the thyroid is not an excretory rather than a secretory organ. The number of cases without any special thyroid pathology raises this question. He believes that the sympathetic nervous system is at the base of the condition, and if this be true, then surgery is wholly illogical and its frequent failure is explained. There can be no doubt that a very respectable number of cases are entirely relieved by medical treatment. There are two chief points to be considered in the treatment, 1. Absolute rest; 2. maintenance of normal gastric and intestinal action. Forced feeding is often advisable. He has had good results from the exposure of the enlarged gland to a low tension tube. His experience with this plan of treatment has been very satisfactory, and if operation is advisable later on, the patient has been much improved and the prospects of the operation are much brighter.

Dr. A. C. Kimberlin spoke of the diversity of opinions and the meagerness of real knowledge concerning this disease and the consequent difficulty in settling on any uniform line of treatment. Hygienic, psychologic and medical treatment are of undisputed value and should always be employed even if surgery is also resorted to. The condition of the mind is often a matter of deep concern and should receive the most careful attention.

Dr. C. F. Neu insisted that a careful distinction should always be made between Basedow's disease and simple hypertrophy, and the two conditions should not be discussed together as is too often done. There is a marked lack of characteristic histologic changes in the thyroid gland in true exophthalmic goiter. Recently an attempt has been made to establish a connection between the thyroid, the suprarenals and the pituitary body in function and control of various activities of the body, and so far the relation is purely speculative.

Dr. McDonald, in closing, suggested hyperthyroidism as a most satisfactory name for the syndrome. He still believes from all the information at hand that hypersecretion of the thyroid is the real basis of the symptoms. The histologic changes may be patchy and in this way overlooked in the examination of the gland. Again the enlargement may be backward or down behind the sternum or clavicles and so escape discovery by the examiner.

Dr. Dorsey, in closing, also defended the hypersecretion theory as the real explanation of the symptoms.

Dr. Reed, in closing, said that it is possible that the changes in the gland are really secondary to some metabolic disturbance, and the vital cause of the trouble may be seated in some far distant region.

The society adjourned. R. H. RITTER, *Sec.*

(Meeting of March 3, 1908.)

The society was called to order by the president, Dr. Wynn. The minutes of the previous meeting were read and approved. The applications of Jacob Buehler and Freeman H. Hibben were read the first time and ordered posted. The application of Charles D. Humes was read the second time and referred to the Council. The Council reported favorably upon the applications of Frank D. Dowd, Raymond H. Stinger, George L. Chapman, Harry G. Gaylord and David F. Lee. This report was adopted and the men declared members. The secretary announced the receipt of a check for \$50 from Mr. J. K. Lilly to be applied to the subscrip-

tion for magazines for the medical department of the City Library.

The program was made up of case reports and exhibition of specimens.

Myelogenous Leukemia.—Dr. Wynn presented a child, aged 14, with an enormously enlarged spleen and all the other typical signs of myelogenous leukemia. After one week's treatment there has taken place a distinct reduction in the size of the spleen, the child has gained two pounds in weight, and is improved in other ways. He also presented a man who has now been under treatment for three years, and whom he had previously shown to the society. The spleen is now barely palpable, there are now no characteristic leukemic changes in the blood, and the man's general condition is very good. In the last year he has not lost a single day from his work as a shoe clerk. Dr. Wynn also reported a case of myelogenous leukemia in a man aged 63, who first noticed the enlargement of the glands and spleen in October, 1907. Since then he has lost thirty pounds in weight, has developed a cough with free expectoration, in which no tubercle bacilli can be found, and has become very anemic. After three x-ray exposures in the course of one week, there developed marked evidences of an extreme toxemia with a temperature reaching 102. The glands and spleen rapidly diminished in size, but the cough became excessive and the expectoration profuse. In the sputum was a considerable quantity of connective tissue. His explanation for the condition is that the rapid absorption of the enlarged glands has produced the extreme toxemia, and the bronchial glands have undergone softening and disintegration. He believes the outlook in this case to be bad.

Gastric Ulcer.—Dr. O. G. Pfaff reported the case of a woman who had pain in the stomach and the right inguinal region for several years. Finally a cystic ovary was removed from the right side. The pain in the pelvis was relieved, but the pain in the stomach continued and became much worse. She then began to have violent attacks of vomiting which would always give temporary relief. There was an excess of HCl in the gastric secretion. The diagnosis of gastric ulcer with dilatation was made and the abdomen opened. The pyloric end of the stomach was found to be the seat of several indurating ulcers obstructing the outflow. A posterior gastrojejunal anastomosis was done and the patient returned to her home in eighteen days, apparently perfectly well.

Tubercular Cerebrospinal Meningitis.—Dr. W. T. S. Dodds reported a case of tubercular cerebrospinal meningitis in a midget 19 years old. The patient was seized with an attack of acute influenza which subsided in three or four days. She was left weak and tired and with no appetite. Shortly after this illness there was evidence of tubercular infiltration of the apex of the right lung, and this spread with great rapidity until the whole upper lobe was affected. The patient went down quickly and was soon confined to her bed. Two weeks before her death she began to show evidences of involvement of the cerebral meninges, violent headache, difficulty in deglutition and phonation. The pulse ranged from 85 to 95 and the temperature from 97 to 99. In about five days there was loss of motor power, altered sensation in the limbs, and impairment of control of the bladder and bowel. Convulsions developed five days before death. He believed the case to be one of miliary tuberculosis; the affection either having been latent in the body and only

called into activity when the system was depressed by the influenza, or the latter condition made infection possible. He mentioned the frequent development of tuberculosis after an attack of influenza, or the increased activity of the disease after such an attack.

Recurrent Chorea Following Acute Infectious Diseases.—(Abstract from Dr. Earp's Paper.) The author spoke of the hereditary neurotic condition and the over taxation of the nervous system of the individual, and in all cases the neurotic element predominates. Anemia is an essential factor.

The first case report is as follows:

Nellie M., previous to 8 years of age, had shown no signs of ill health, with the exception that there was slight evidence of anemia. In July, 1899, during her ninth year, an attack of whooping cough followed scarlatina and then came chorea, at which time it necessitated her removal from school, in November. Between the attacks of whooping-cough and chorea she had hay fever, which has been present during July and August each year since that date, until 1907. During May and June of each year from 1899 until 1908 she has chorea, and each time it has been preceded by acute articular rheumatism. In October, 1907, she had an attack of hay fever following rheumatism, but there was no evidence of chorea. In January, 1908, rheumatism again made its appearance and a week later chorea. February 21, 1908, the patient gave every evidence of being well.

The treatment consisted of salicylate of sodium, salicylate of iron and Fowler's solution. Instructions in reference to absolute rest were not followed, and at different times such agents as elixir of valerianate or ammonia, bromid of sodium and chloralamid as restorative agents were used to overcome malnutrition.

The essayist thought the patient would permanently recover from these diseases if she were divorced from her home surroundings.

Two other cases were reported; one associated with measles and the other with rheumatism.

The treatment did not differ materially from that of the first case. One observation in the last case seemed to be of some importance. It was necessary to operate for adenoids, believing that it is a predisposing cause to chorea. Previous to the child's illness she was rude, nervous and impudent, and had failed to make her grade in school. Since her recovery she has been a leader in school work, has an amiable disposition and is especially bright in mathematics.

Dr. T. B. Eastman exhibited the clamp or towel holder which Moynihan has recently devised for holding a towel in close contact with the edges of the incision so that the hands and instruments of the operator do not come in contact with the patient's skin during the operation.

Atrophic Cirrhosis of the Liver.—Dr. C. J. Cook presented a man, aged 47, with a typical case of this disease. He discussed the pathology and course of the disease.

Colostomy with Continence.—Case report by Dr. H. H. Wheeler. Female, aged 42. History of rectal trouble for thirteen years. Five years ago it began to grow worse and for ten months she has not been able to follow her vocation, which is that of a seamstress. There were frequent bloody stools, accompanied by pus, with no relief from pain. She lost 40 pounds in weight and was probably losing ground. There were papillomatous masses about the anus and three fistulous openings. The rectum was narrowed and the

mucosa ulcerated as far up as could be felt and seen. No improvement resulting from the ordinary treatment, a colostomy was done in the left inguinal region. The intermuscular incision was used. The bowel was opened on the seventh day. After five or six weeks of incontinence she gradually gained control and at the present time she has two natural movements a day with slight sphincteric control. She has gained 40 pounds in weight and has resumed her former vocation. The speaker reviewed the indications for this operation.

Spindle-Cell Sarcoma.—Dr. William Shimer exhibited under the microscope a section of a spindle-celled sarcoma removed from the finger of a man aged 35. Two years ago two small nodules appeared, one on the palmar and one on the dorsal surface of the second phalanx of the second finger. These had grown to the size of a pigeon's egg, causing no trouble except interference with flexion of the joint. The patient was given one tablet of the scopolamin-morphin-cactin mixture and the site of operation infiltrated with a 1 per cent. cocaine solution. No untoward symptoms were noted. The tumors were round, encapsulated and had produced an erosion of the bone by pressure, there being no evidence of involvement of the bony tissue. This is the tumor formerly called recurrent fibroid, but now recognized as a true sarcoma. They frequently recur when removed, but rarely form metastases.

Rupture of the Heart.—Dr. John Kolmer read the following autopsy report: Man, aged 65, found dead in his bed. In 1890 he had received an injury on the head from the handle of a pick in a coal mine; in 1904 he had received a second injury, and in 1907 a third one. Since the last injury he had frequent attacks of the most intense pain in the vertex, and great weakness. Since the first injury he has had epileptiform seizures. The calvarium was removed with difficulty because of firm adhesions of the dura. On the inner side of the dura was a piece of bone the size of a lima bean, around which was a cystic area of brain tissue three inches long and two inches wide. Around this blood vessels were decidedly hardened. The whole brain looked somewhat bleached. The lungs were very dark, almost black, and quite firm, as if consolidated. The pericardium was full of clotted blood and serum. The right auricle showed a rupture along the auriculo-ventricular septum, and the left auricle showed a small rent just beneath the appendage. All the valves were calcareous. The walls of the ruptured auricles seemed no thicker than ordinary paper. The right kidney was granular on the surface and contained pus. The spleen was somewhat enlarged.

Dr. F. B. Wynn demonstrated the interesting features of the heart presented by Dr. Kolmer. He called attention to the mitral stenosis, the consequent dilatation of the left auricle and the dilatation of the right heart with relative incompetence of the tricuspid valve. The condition of the lungs was evidently due to a chronic passive hyperemia.

Dr. Guido Bell, in referring to the rupture of the heart, mentioned a case in his own experience of a woman who had given absolutely no symptoms of cardiac trouble, who had gone uneventfully through labor the day before, and who suddenly stretched out her arms and died. The heart was found ruptured.

Dr. R. H. Ritter called attention to the shape of the auriculo-ventricular orifice in stenosis. It is almost invariably crescentic, forming the so-called but-

ton-hole orifice. It is said to be a fact in physics that fluid will flow more rapidly through a slit than through a round hole, the two being of equal area. If this be so, it is fortunate that in the heart the stenosed orifice assumes the shape.

Dr. A. W. Brayton, referring to the occurrence of the sarcomata, recalled the cases of xeroderma pigmentosa which he had reported on a number of times. In these cases there were great numbers of small sarcomatous tumors formed on the limbs.

Dr. E. C. Thompson, referring to Dr. Earp's remarks concerning chorea caused by the acute infectious diseases, reported four cases of chorea, three of them in one family. In three of these cases there was a history of rheumatism.

The society adjourned.

R. H. RITTER, *Sec.*

(Meeting of March 10, 1908.)

The society was called to order by the president, Dr. Wynn. The minutes of the last meeting were read and approved. The application of Dr. Frank E. Abbett was read the first time and ordered posted. Dr. A. M. Cole moved that a committee be appointed to take steps to have physicians' vehicles exempted from the present city ordinance regulating the speed of vehicles. This committee as appointed by the president, consists of Drs. Cole, Potter and Dorsey.

The Modern View of the Etiology and Treatment of Acne Vulgaris and Acne Rosacea was the title of a paper read by Dr. A. M. Cole. After discussing the pathology the author expressed the following conclusions:

1. Acne vulgaris is usually a pyogenic infection implanted on skin whose functions are perverted by the influence of age, reflex disturbances or seborrhea.

2. Acne rosacea is an acne implanted on a chronic hyperemia or rosacea which arises almost invariably from reflex influences from the gastrointestinal tract or pelvis.

3. Internal treatment in both varieties of acne is exceedingly important. Reflex disorders must be sought for and corrected, if possible, before the best results can be obtained.

4. External drug treatment in both diseases is usually disappointing. Sulfur, in the form of lotio alba properly made, is the best external preparation and should vary in strength suitable to the condition of the disease.

5. Mechanical treatment, such as the use of hot water, soap, massage and the dermal curette, is exceedingly valuable.

6. The opsonic method in acne vulgaris is promising.

7. The Roentgen treatment in both acne vulgaris and acne rosacea is the most valuable. In its certainty of cure and infrequency of relapse it almost approaches a specific.

8. The technic of using the x-ray in acne is of paramount importance. If the ray is properly applied there should be few if any failures and no undesirable results.

Gonorrheal Ophthalmia was the title of a paper read by Dr. W. N. Sharp. The points brought out by the writer were:

1. As it is known by so many different names which are liable to confuse the practitioner it should be designated by the term gonorrheal.

2. As death has occurred in the infant from joint and other affections caused by the gonococcus, it is pos-

sible that such infection occurs through the circulation intrauterio.

3. As the state law of Indiana prohibits the marriage of persons having "venereal disease" the guilty parent of the infant having gonorrheal ophthalmia should be punished by fine or imprisonment or both.

4. As so many cases of purulent ophthalmia resemble the gonorrheal type, for protection in case of medico-legal involvement, smear examinations should be made in every case.

5. As cleanliness is next to godliness it should be the most important part of the treatment.

6. Argyrol has been a sufficient antiseptic in the hands of the writer in combating virulent cases when frequently applied in full strength.

7. Properly trained and intelligent nursing is absolutely necessary to success.

8. The conscience of the physician should be alert in the management of every case.

DISCUSSION.—Dr. F. B. Wynn, in discussing Dr. Cole's paper, said that the etiology of acne is a broad subject in itself and involves a wide discussion. He is inclined to lay very little stress on the relation of acne vulgaris to constitutional disorders; in four-fifths of all cases it is a purely local condition. While occasionally found in the anemic and cachectic, it is most often found in vigorous, healthy boys and girls. In acne rosacea, on the other hand, reflexes, gastro-intestinal disorders and faulty habits are of prime importance. In the treatment of acne vulgaris, then, the treatment is purely local except in the occasional case of anemia. He believes that the anemia may be secondary to a severe pustular acne as the result of prolonged absorption. In this condition he uses the sulfur ointment more than the lotion. In acne rosacea he has had the best results from the use of resorcin, so far as local applications are concerned. Permanganate of potassium in solutions strong enough to cause tingling of the skin has in some instances of acne vulgaris given him good results. If used in solution strong enough to discolor the skin, it may be decolorized with oxalic acid. This drug is most effective in cases with marked seborrhea. General treatment is of the greatest importance and should never be neglected. The induction of passive hyperemia by the use of small cups is effective in some cases. He is impressed with the theoretical value of the Krehmeier drill, although he has never used it; it seems to be preferable to the curette. He is hopeful that the opsonic method may become of great help in the treatment but at present it is not yet established. In using the x-ray the different types of acne should be kept clearly in mind. The efficiency of this procedure can not be doubted, but it is not always necessary or advisable to use it. Acne papillosa and superficial pustular acne may be in almost every instance cured by the use of sulfur, and the x-ray, while always curative, is not always essential. In acne indurata, with large masses of pus and sebaceous material deep in the skin and subcutaneous tissue, he has seen a latent or passive process fired up into great activity by the use of the x-ray and deplorable scarring and atrophy follow. The x-ray should always be used with the greatest care and while, generally speaking, no harm should be done with this agent, there are still unavoidable cases encountered in which harm will inevitably be done. Often atrophy takes place long after its use when the acne is gone and all seems well. This atrophy seems to prefer the usual location of wrinkles, and thus the face is aged and disfigured. He now is

extremely careful to protect every bit of skin which it is not intended to affect, and especially the corners of the mouth and other locations in which wrinkles are prone to develop. With all these remedies, and no matter how complete the cure may seem, relapses are common even after the lapse of considerable time. In such cases, if treatment is begun at once again, the disease may usually be arrested and cure again speedily effected. While he agrees with the essayist that the x-ray is the most effective agent in the treatment of this disease, he can not fully agree with him in his assurance as to its complete harmlessness even when used with the greatest care.

Dr. F. C. Heath, in discussing Dr. Sharp's paper, said that out of the many terms suggested and used to denote an inflammation of the eye caused by the gonococcus, he prefers the simple term gonorrheal conjunctivitis. He does not accept the view of some that if the disease does not develop within one week after birth it is not due to infection from the vaginal canal, but believes that it is quite possible for an infection to occur during the passage of the fetal head and the acute inflammation to be postponed for some time. One of the most characteristic features of this inflammation is the swelling of the corneal conjunctiva and this is the greatest source of danger so far as vision is concerned. Doctors should adopt every prophylactic measure in treating cases of gonorrhea and warn patients of the danger to others and to their own eyes. He believes firmly in the efficacy of argyrol; in his mind its efficacy has been abundantly demonstrated. One of its greatest advantages is its painlessness. In adults it is not as effective as in children. It is occasionally necessary to incise the outer canthus and use the stronger salt of silver, the nitrate.

Dr. A. W. Brayton, in discussing Dr. Cole's paper, said he is not distracted by the newer methods of treatment nor inclined to underestimate the great value of the older and fully tried methods. The x-ray is full of hope, but is not yet established nor its province fully defined. He sees no hope from the vaccine therapy. He emphasized the necessity of taking up these cases of acne which mean so much in the happiness and even success of young women, especially, seriously and exerting every effort to relieve the patients.

Dr. H. H. Weer called attention to Bulkley's opposition to the use of arsenic in acne, which had been advocated by the essayist. The former gives most frequently bitter tonics combined with an alkali. This discussion on Dr. Cole's paper illustrated very well the quite general confusion as to the use of the x-ray in this disease.

Dr. A. S. Jaeger insisted that education and not legislation is the proper way to get at the evil of venereal disease and prevent the disastrous effects of which blindness is one.

Dr. Cole and Dr. Sharp closed the discussion with an emphasis of some of the points made in their papers, and the society adjourned.

R. H. RITTER, Sec.

MIAMI COUNTY.

The Miami County Medical Society met in regular session in Commercial Club room, Peru, on Friday, March 6, with twelve members and one visitor present. Society was called to order by President E. H. Griswold. Minutes of previous meeting were read and ap-

proved. Dr. J. C. Fretz read a paper on "Etiology of Carcinoma." Dr. C. E. Goodrick presented a patient for a clinic, with an affection of the skin. Dr. E. H. Griswold gave a talk on "Benign Tumors of the Breast; Diagnosis and Treatment." Discussions followed.

Adjourned.

D. C. RIDENOUR, Sec.

PUTNAM COUNTY.

The Putnam County Medical Society met March 5, with Dr. W. W. Tucker of Greencastle. Dr. Walter McGaughey by the exhibition of specimens and illustration by drawings, gave the minute anatomy of articular structures; Dr. Chas. Sudranski discussed the subject, "The Orifices and Valves of the Heart and the Anatomy of the Endocardium;" Dr. Chas. F. Hope read a paper on "The Etiology of Acute Rheumatism" and discussed the theories of causation by diplococci and other micro-organisms, and called attention to the predisposing causes. Dr. J. V. Bastin, in an exhaustive paper discussed the pathology and clinical history of acute articular rheumatism. Dr. Hutcheson closed the meeting by discussing the "Complications and Treatment of Acute Rheumatism."

Since the introduction of the post-graduate work into this society meetings have been held every two weeks. The enthusiasm has been unbounded and the "heart to heart" talks have been of frequent occurrence among the members. A mutual good fellowship is being rapidly developed, and the valuable papers and friendly discussions presented at the meetings are wiping the "cobwebs" from the minds of the physicians, who are already scrambling to get out of the "ruts."

Adjourned.

J. V. BASTIN, Sec.

On March 19 the Putnam County Medical Society met with Dr. Joseph Gillespie. Dr. Eugene Hawkins, on the subject of "Rheumatism of Children," said that unless we dismiss the summary of symptoms as manifested by the disease in the adult we will be unable to properly appreciate and diagnose the disease in childhood. He regarded heredity as a cause in the majority of cases. He said that a dyscrasia was rapidly developed in those having a primary attack. The frequent occurrence of, and the dangers attending cardiac complications, in children, he thought was being underestimated by the average physician. He believed that the proper hygienic care during and after the attacks would lessen the complications, eradicate the disease itself, and prevent recurrence better than all therapy.

Dr. Joseph L. Preston discussed the subject of "Gout" and said that the disease is due to nutritional disturbances. He reviewed the disease from the days of Hippocrates, congratulated the brothers that they had no local manifestations and advanced the theory that this immunity was due to pecuniary conditions which prevented high living by the members of the medical profession.

Dr. Clint Zaring discussed "Myalgias" and recommended acupuncture with three of four inch needles and the injection of sterile water and anodynes.

Dr. Joseph Gillespie presented clinical cases of "Arthritis Deformans" and discussed at length the etiology, symptoms and diagnosis of the disease, but said that as to treatment he had exhausted the Pharmacopeia and gotten no beneficial results.

At the conclusion of the meeting a smoker was enjoyed.

Adjourned.

J. V. BASTIN, *Sec.*

SPENCER COUNTY.

The March meeting of the Spencer County Medical Society was held in the office of Dr. H. G. Weiss, of Rockport. As Dr. C. H. Adye, a member of the board of censors, had moved away, Dr. H. G. Weiss was elected in his place. The applications of Drs. S. C. Lang, W. H. Williams, L. O. Walters, Scott Cook, D. V. McClary, C. S. Baker and Geo. B. DeTar were accepted by the board of censors and they were admitted to membership in the society. The members on the program being absent a social time was enjoyed. A motion was made and seconded that the society have special meetings in the months of April and May. The April meeting will be held at Chrisney, April 21, 1908.

Adjourned.

EVA BUXTON, *Sec.*

TWELFTH DISTRICT MEDICAL SOCIETY.

The next meeting of the Twelfth Councilor District Medical Society will be held in Fort Wayne April 21, 1908. Papers will be presented by Drs. J. Clarence Webster of Chicago, A. W. Brayton and John F. Barnhill of Indianapolis.

VANDEBURGH COUNTY.

At a recent meeting of the Vanderburgh County Medical Society the following officers were elected to serve one year: President, Dr. Ludson Worsham, Evansville; vice-president, Dr. G. C. Johnson, Evansville; and secretary-treasurer, Dr. W. R. Davidson, Evansville.

Adjourned.

W. R. DAVIDSON, *Sec.*

BOOK REVIEW

DISEASES OF THE HEART. By Prof. Th. von Jurgensen, of Tübingen; Prof. Dr. L. Kiehl, of Greifswald; and Prof. Dr. L. von Schrotter, of Vienna. Edited, with additions, by George Dock, M.D., Professor of Medicine, University of Michigan, Ann Arbor. Octavo of 848 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$5.00, net; half morocco, \$6.00, net.

This excellent work fills a long-felt want in the library of the English speaking physician. And with the careful elaboration of its editor, Dr. Dock, it becomes a veritable masterpiece upon a subject upon which reliable information is eagerly sought by every practitioner of medicine and particularly the internist. Like all the other volumes of the series, the book is excellently constructed from the printer's and binder's standpoints, and is carefully and minutely indexed.

The editor prefaces his work by calling attention to the need of such a work in the English language, in which there has been a woeful paucity, despite the fact that many important contributions have been made by the English-speaking profession concerning the normal and pathological anatomy of the heart, its physiology and the circulation, diagnostic methods, pharmacology of cardiac remedies and the application of non-medicinal measures to the treatment of patients

with heart disease. Few changes from the original have been made save in wording and in making the medicinal preparations conform to the U. S. Pharmacopoeia. Such matter as has been brought out since the publication of the original, has been added by the editor.

Many points of interest are brought out by the authors which merit consideration, such as the broader conception of the pathology of a chronically insufficient heart which Prof. von Jurgensen would describe as a pancarditis rather than attempt to limit the nomenclature so as to apply to one part of the heart only, for in such a condition all parts are functionally deficient, particularly the heart muscle.

One of the most satisfactory elements of the work is the detailed way in which the subject of treatment is taken up, little being taken for granted. The editor has certainly shaken our views upon the superiority of the infusion of digitalis over the tincture, and accounts for the lack of definite results from the latter preparation by explaining that the real equivalent of the ordinary dose of the infusion is seldom made use of when the tincture is employed, viz., about 45 minims.

The work is well illustrated by case histories, charts, plates and tracings, and is in every way worthy of the name of its experienced authors and collaborators.

ABSTRACTS FROM CURRENT MEDICAL LITERATURE

Chicago has resumed enforcement of the anti-spitting ordinance. February 24 twenty-one men, who had been arrested in the down-town districts for spitting on sidewalks and platforms were found guilty and fined \$1 and costs each.—*The Chicago Medical Recorder*.

Enough attention is not paid in some of the north-western towns to the practice patent medicine distributors have of sowing samples broadcast on the doorsteps of the people. In some cities ordinances exist against this practice, but elsewhere the public sentiment has not been sufficiently stirred to enact local legislation against it. Pills, powders and herbs are frequently scattered over the porches and doorsteps, and because of the brightness of the preparations and their aromatic flavor children regard them as candy and do themselves great injury by eating them. Such drugs as acetanilid, morphin, cocain and strychnin, are contained in many of these preparations, deftly concealed beneath the sugar coating. Perhaps if we had women in our city councils they would take more interest in preventing this evil than is now taken by the men, who, presumably, have things of greater moment to discuss and consider.—*Medical Sentinel*.

THE HARM OF CONTRACT PRACTICE.—The question is of special interest to the young practitioner who knows nothing of the trials about to confront him and who thinks that the perplexities of diagnosis and treatment constitute his real difficulties. Notwithstanding careful preparation, the young practitioner finds the number of his patients in inverse ratio to his expectations. On investigation he learns that various fellow practitioners are under contract with corporations, lodges and fraternal societies, to treat the employes or members, or even the whole families of members, at a ridiculously low price.—*Wisconsin Medical Journal*.

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ORIGINAL ARTICLES

THE HISTORY, CAUSES AND PREVENTION OF TUBERCULOSIS.*

M. RAVDIN, M.D.

EVANSVILLE, IND.

"Look up and not down.
Look forward and not back,
Look out and not in, and lend a hand."
—Rev. Dr. Edward Everett Hale.

In the distant past, in the days of our ancestors, when the science of medicine was pure empiricism and hygiene in its early infancy, the lot of the consumptive was, indeed, a wretched and hopeless one. Very little if anything was known in those early days of the cause of tuberculosis or of its various effects upon the system. All efforts to cure or relieve the conditions were, in the light of our present knowledge, imperfect and barren of satisfactory results. The consumptive saw before him naught but misery. The death warrant was signed and it remained only for "Father Time" to execute it. As we advanced in knowledge, step by step, slowly but surely, the great searchlight of modern methods of research and laboratory investigation has broken through the clouds of superstition, ignorance and uncertainty. The last remnant of obscurity, so far as the real cause of consumption was concerned, melted away when Prof. Robert Koch discovered in 1882 the bacillus named after him and proved it, to the satisfaction of the scientific world, to be the only real cause of tuberculosis.

Professor Koch's epoch-making discovery brought hope and a new lease on life for the pulmonary invalids. This faint ray of hope has continued to grow brighter, wider and stronger as modern medical research has advanced upon

its triumphal march. The cause once known, the disciples of Hippocrates have set to work to find effective weapons with which to fight it successfully. Hundreds, nay thousands, of the noblest and brainiest of our profession have enlisted in this volunteer army against the white plague, and many illustrious names from all civilized nations have covered themselves with glory on the silent battlefield. Great, indeed, were the discoveries in the field of pathology, bacteriology, and chemistry, and we now have effective weapons with which to stay the deadly march of the white plague, and if not absolutely to cure but control tuberculosis.

Science has spoken. It remains now for our national, state and municipal governments to provide the means for the execution and application of the remedy. It becomes the duty of organized society to demand the enactment of proper legislation and its proper enforcement. While the majority of tuberculous patients will only too gladly carry out all necessary precautions, the minority will continue to perpetuate the disease through poverty and ignorance, and for these few we must have laws and regulations, hospitals and sanitariums, where they can be under official control for their own welfare and for the good of the community.

The necessity for state and municipal institutions for consumptives becomes at once apparent when we remember that hundreds of human lives are daily sacrificed to this moloch in our own dear country. This grim reaper selects the majority of its victims from among those in the prime of youth and early maturity, those whom the world needs most, those who have everything to live for and to whom life means most. Think of the numberless homes broken up, the widowed young wives, the motherless children, the homeless orphans, left to shift for themselves as best they can, with probably the seeds of consumption

* Read by invitation before the "Monday Night Club" on March 3, 1908. Published by request of the "Monday Night Club."

planted in their lungs. Think of the army of such children growing up without the tender care of a loving mother, without wholesome home influences. But it seems to me that the world has become accustomed to the presence of tuberculosis, for society does not respond as it should to the appeal for aid with which to fight this grim reaper. But for all this, sanitary and medical sciences will win the battle. The time will come when tuberculosis will be not only preventable but curable also. The seeds are planted and by the end of the twentieth century the white plague will, well nigh, be eradicated. Two centuries hence tuberculosis will only be known in history, as are now the great plagues of the middle ages. To speed the day of this millenium we all must work together, we must look forward and not back, and lend a hand.

HISTORY.

The ancient physicians had no knowledge of tuberculosis in its present sense, although the disease must have existed since man became a social being and lived in close communities.¹ The ancient physicians were familiar with only the outward phenomena of the disease which manifest themselves in the later stages, such as progressive emaciation, expectoration of pus, etc.

Hippocrates (400 B. C.) taught that the disease was due to suppuration and ulceration of the lungs. Some of the Greek physicians recognized phthisis, as they called the disease, to be infectious. Celsus (50 A. D.) held that phthisis was due to lack of proper nutrition, poverty and chronic diseases, conditions which we now recognize as being predisposing factors only. Aritaeus, the Cappadocian (50 A. D.), left a description of the consumptive, which can hardly be improved upon in the present day. His treatment was mainly hygienic and dietetic. Some of his recommendations, says Whittaker, read as though written yesterday. For instance, he ordered perfect rest, anointing the body with oil, outdoor life, sea voyages, eggs in plenty, and milk. Galen (150 A. D.) recognized the value of fresh, pure and dry mountain air for the phthisical patient, and sent his patients to dry climates and to Mount Vesuvius. For fourteen hundred years after Galen we may discover nothing new added to the knowledge of phthisis. The teachings of the ancient Grecian fathers were accepted by all physicians during the middle ages. Thus we find that the most learned Arabian physician, Avicenna (1037), while he had "definite ideas regarding

the infectivity of tuberculosis," added little to the knowledge of its cause; nor did the learned Jewish physician Moses ben Maimon or Maimonides (1135 A. D.), with all the advantages he possessed in the postmortem inspection of the bodies of animals killed for food, according to the rabbinical code.

Let us pause for a few moments to inquire into the cause for the stagnation of medical advance in the dark ages. Says Huber: "During the dark ages Europe was essentially dominated by a theology which required absolute submission and adherence to the teaching that plagues and epidemics were visitations of an angry God, and that the tendency of this theology was to suppress a rational investigation of the causes of disease, such investigation being held to be a sort of sacrilege, as if, indeed, a just and merciful God would cruelly torture and destroy his own creations, which must appear to an Omnipotent Creator so pathetically helpless: as if reason and the ascertainment of knowledge were not states of the human mind, as essentially God given as any other, to be employed as conscientiously as any other; as if the use of these wholesome faculties were in any way incompatible with the possession and exercise of the deepest religious sense. Thus it was that many millions of lives were destroyed which might otherwise have been saved."

After the Renaissance conditions changed to the better. The study of anatomy became possible and dissections were permitted. In the middle of the seventeenth century, tubercles or nodules were found in the lungs and first described. Sylvius (1680) was the first to discover that these tubercles break down, soften in their center, and form pus, but he believed the tubercles to be glands in the lungs which undergo diseased processes. Morton (1689) taught that phthisis was due to hardening or induration of the lung tissue and tubercles. Mangetus (1700) first discovered a case of general tuberculosis, with dissemination of the minute nodules in the lungs, liver, spleen, kidneys, mesenteric glands, etc. Time will not permit me to review the labor of Willis, Bonnett, Dessault, Sydenham, Boerhave, and his pupil Avenbregger, the discoverer of percussion of the chest, nor of the illustrious Italian anatomists, Valsalva and Morgagni. In 1785 Stark and Reed recognized the true value and significance of the minute tubercle and showed that Sylvius erred in assuming that the tubercles were glands in the lungs. The first half of the nineteenth century furnishes an interesting chapter in the history of tuberculosis. Among the many investigators of that period we find two, Bayle and Laennec, standing in the

1. The earliest mention of tuberculosis we find in the Bible: Leviticus 26:16 and Deuteronomy 28:22.

foreground and illuminating with floods of light the yet obscure horizon of pathology.

Bayle (1803-1810), finding the tubercle deposits in almost every organ of the body, including the larynx, considered them not as accidents or curiosities, but as real deposits of the same disease. He was the first to name the small nodules "miliary tubercles" and was the first to demonstrate that the tuberculous deposit is not the result of other diseases, but that it is a distinct pathologic entity, a distinct disease. Bayle then described, as Whittaker puts it, "the dead facts of the disease," but he knew of no signs by which the presence of the tubercle deposit in the lung of a living person could be detected before pus expectoration began, and fever set in, and it remained for the great clinician, Laennec, in 1819, by his discovery of auscultation of the lungs, to enable the recognition of the disease in its earlier stages. From that time on tuberculosis became the battle ground for pathologists, some affirming, others denying the observations of Bayle and Laennec and their pupils. It is remarkable that such prominent men as Rokitansky, Lebert, Reinhardt, Addison, and the illustrious pathologist, Virchow, stood opposed to the truth as taught by Bayle and Laennec.

In 1865 Villemin appeared on the arena. Villemin discovered that tuberculosis may be transmitted from men to animals by inoculation. His experiments were made on rabbits, guinea-pigs, and cats. The animal inoculated recovered from the local wound quickly, but when killed a month or so later tubercles were found in the lungs, pleura, peritoneum, and intestines. Control experiments of inoculation with pus from abscesses and ulcers showed no trace of tuberculous deposits. Hence, Villemin rightly concluded "that tuberculosis is a specific disease; that it is inoculable; that it may be successfully transmitted from man to animals." Therefore, "the disease arises either by accidental inoculation, by direct contagion, or, finally, by germs suspended in the air or contained in the tuberculous matter." The last statement, says Whittaker, Villemin made "as if illuminated by a flash of inspiration." The committee appointed by the Paris Academy of Medicine to investigate the claims of Villemin and his methods confirmed all his conclusions. Nevertheless the battle with pen and ink, in the laboratory, at the bedside, and lecture hall continued unabated until Tappeiner and Conheim (1878-1880), after years of experiments and arduous labor, again confirmed Villemin's observations and conclusions.

In the meantime other investigators began the search for the specific cause of the genesis of the

tubercles, for the specific animal or vegetable germ, and in 1882 Prof. Robert Koch startled the whole world by his brilliant and epoch-making discovery of the slender bacillus of tuberculosis or "bacillus Kochii." Professor Koch presented the results of his memorable work before the Physiological Society in Berlin on March 24, 1882, under the title of "The Aetiology of Tuberculosis." The communication was published April 10 of the same year in the *Berliner Klinische Wochenschrift*. April 26, 1882, Prof. Koch delivered a lecture before the Congress of Internal Medicine at Wiesbaden. In this lecture, Koch dwelt at length on the points which led up to his final discovery of the real and only cause of tuberculosis. Koch won for himself a golden memorial tablet in the hall of fame of medical history. In the ages to come the memory of him and his work will stand out as an indestructible monument and will be an incentive to the aspiring bacteriologist.

CAUSES OF TUBERCULOSIS.

The factors involved in the production of tuberculosis are the same as in most infectious diseases, namely, predisposing, favoring or indirect and exciting, direct and specific. The predisposing factors are those which lower our vitality or resisting power, make us more or less vulnerable and thus favor the action of the specific factor. Among the predisposing factors we may mention age, sex, race, heredity, previous diseases, vicious habits, poverty, unhygienic surroundings, climate and soil. We will discuss them in order of their importance.

Age.—At the extremes of human life, old age and childhood, there is a greater predisposition to disease. In both instances the resistance is low. Children suffer more than adults from tuberculosis of the lymph glands (scrofula), bones and joints, the spine (Pott's disease), peritoneum, and the covering membranes of the brain, while pulmonary and laryngeal tuberculosis is seen more often in the adult. But children who contract tuberculosis of the lung succumb to it more readily than adults. Old people very seldom contract pulmonary consumption.

Sex.—Certain periods and conditions in a woman's life make her more vulnerable, hence more prone to infection, but under favorable conditions of life and surroundings, no women are more liable to contract the disease than men. In crowded tenement districts with their ever-present filth, women are more exposed to the disease, because they are more closely confined at home.

Race.—People in a primitive state of life when brought under the influence of civilization are very prone to tuberculosis, a fact observed among the American Indians, negroes, and Eskimos. According to Harris and Millard, cited by Huber, tuberculosis does not occur on the west coast of Africa nor in the African interior, except when brought there by white people. The American Indian was almost free from tuberculosis as long as he spent most of his life in the open hunting ground, ate his corn and venison and drank only pure fresh water. As soon as he became accustomed to "fire water," introduced to him by the white trader or trapper, as soon as he learned the bad habits, not the good, of the pale face, in short, as soon as he became only semi-civilized, the red man began to furnish victims to the "white plague."

Before the Civil War, tuberculosis was rare among the negroes; now they furnish a large number of consumptives. Professor Osler found among 427 cases of pulmonary tuberculosis at the Johns Hopkins Hospital, for the two years ending June 1, 1891, 41 cases among the colored, while Rodman, as cited by Anders, states that tuberculosis is twice as common in the colored as in the white race.

The effect of tuberculosis on white people can best be studied in the large American cities, because of the cosmopolitan character of the population, as well as on account of the overcrowded tenement districts. In studying the statistical data of American observers in the large eastern cities, I find that the highest mortality from consumption is among the Irish and Bohemians; that Americans of native parentage furnish a comparatively small percentage, and that the lowest death rate from consumption is among the Jews. In the statistical data of European observers, we again find the lowest death rate from consumption among the Jews. How can we account for this phenomenon? What factors are there in the life or in the racial make-up of the Jew that protect him from the "white plague"? To say that the poor Jews in the crowded tenement districts of the large eastern cities, especially the lower east side of New York, live in better hygienic surroundings and are more sanitary than other people would be unfair, indeed. The personal hygiene of the very poor Jews in New York, Philadelphia, etc., is certainly not to be commended. I had occasion to observe this in the various dispensaries and out-patient departments of the large hospitals in New York and Philadelphia. The air they breathe in the tenements and workshops, to say the least, is vitiated and full of dust; in the streets the air is

not much better; they work very hard and so do their young children to help keep the wolf from the door of the family; "their lungs expand very poorly," says Huber; "they have no chests." Their invalids and old people do not return to the old country home to live and to die as do people of other nationalities; they come to live and to die in this land of freedom and liberty. Persecuted in Russia and Roumania, they come here for a permanent home, as my worthy friend, Rev. Dr. Merrit, said. What, then, is the cause of the low mortality from consumption among the Jews? We may explain this phenomenon in the term, "sobriety of life." The Jewish people, while not exponents of the temperance propaganda, are nevertheless temperate. They have no drink problems to solve; they consume alcoholic beverages in strict moderation, and this is an important factor, indeed, for the preservation of health. With very rare exceptions they obey to the letter the dietary laws of Moses. The meat they eat must be "Kosher," which term signifies "fit and clean." Meat is "Kosher" only when derived from a healthy animal of the order of ruminants—they that both "divide the hoof and chew the cud." The animal is slaughtered for food purposes in the manner prescribed by the rabbinical code and a postmortem examination is made by an experienced official, who rejects as "trepha" or unfit such meat as is likely to be diseased. Animals killed in the chase and which have, therefore, undergone fatigue and suffering are also excluded. "That fatigue and suffering produce toxins or poisons in the meat of such an animal is a well-established fact of modern medicine." The Jews cook the meats well and very seldom eat pork, which is likely to be tuberculous. Those of you who read Sinclair's "Jungle" will admit that but very few people are so well protected from diseased meat as are the Jews. The milk they drink is mostly boiled, and, last but not least, they must have acquired an immunity from tuberculosis during the forty centuries of their continued existence as a race.

Heredity.—In looking over the literature regarding the influence of heredity upon the development of tuberculosis, we come upon a variation of opinion. Thus evidence of the direct transmission of the disease from parent to offspring is brought forth by some, while others claim that the parent may confer a total immunity to the disease upon the offspring. However, the majority of observers agree that what the child does inherit is a weakened constitution and the tendency to the disease. Huber describes certain signs by which this hereditary tendency to tuberculosis may be manifested. He groups them

collectively under the term "scrofulous temperament." "The scrofulous child," says he, "has a pallid skin and flabby flesh; there is often chronic blepharitis (lid disease); phlectenulæ (a disease of the eye) are frequent; there are nasopharyngeal adenoids and enlarged tonsils, so that these children are mouth-breathers, starved for oxygen. There are tedious inflammations of the mucous membranes—coryza—congested and unhealthy throats and bronchitis rebellious to treatment; there are persistent adenitis, the lymph glands become large and remain so; there is a sluggish turbid metabolism. All together there is evidence of a radical nutritive disturbance. Besides struma, we find thoracic malformation, narrow chests, lacking in depth, projecting shoulder blades, and small respiratory muscles."

Huber gives here a true picture of the mouth-breathing child, which we often see in our consulting rooms, and, while these manifestations may be due to hereditary influences of some sort, I must disagree with him on the kind. I have had under my professional care just such children, whose parents and grandparents, on both sides, were free from tuberculosis, lues, or any other functional, pathologic, or anatomic stigmata. The fact is that nasopharyngeal adenoids interfere materially with normal respiration through the nose, which organ filters, moistens and warms the air as it passes through it on its way to the lungs. Mouth-breathers inhale, therefore, cold, dry, dust and germ-laden air, and thus the tissues of the deeper respiratory passages become more vulnerable. The delicate, membranous walls of the air vesicles in the lung become thickened, due to constant irritation and perfect oxygenation of the blood is interfered with. The child starves for the want of oxygen, and in time the other signs described by Huber manifest themselves, due directly to the lack of the blood-purifying, tissue-animating, and life-giving oxygen. By timely removal of the growth and proper systemic treatment the majority of such children recover perfect health.

As to adenoids and enlarged tonsils being a manifestation of some sort of a dyscrasia we all agree, of course, but as to their always being an evidence of hereditary transmission of tuberculosis or lues I must emphatically protest. However, it must be borne in mind that such children are certainly very susceptible to tuberculosis and infections in general.

Acute diseases, as typhoid fever, pneumonia, pleurisy, whooping cough, influenza, measles, and some of the chronic diseases, especially diabetes, greatly predispose the afflicted to tuberculosis. The tissues of the organs of respiration are pre-

pared by the previous disease for the reception and implantation of the tubercle bacilli; especially is this true of la grippe.

Occupation.—The influence of occupation as a predisposing factor in the causation of tuberculosis is very great, indeed, but I must refrain from a thorough discussion of the subject for lack of time and space. Stated in general terms, I will say that persons who work in dust-laden atmospheres, in crowded, badly lighted and illy ventilated rooms, who are exposed to irritating chemical gases, tobacco and marble dust, and those whose occupations require a stooping constrained position are greatly predisposed to the disease. People who spend their leisure time in the worship of Bacchus and Venus also show very little resistance to tuberculosis.

Climate and Soil.—Humidity of the soil and abundant atmospheric moisture increase the prevalence of tuberculosis. It is especially met with in regions where protracted cold and dampness prevail. Osler says that this "increased incidence is most probably associated with a heightened vulnerability due to an increased tendency to catarrhal affections of all kinds." Dry and mountainous regions are noteworthy for freedom from the disease. We need not discuss poverty and unhygienic surroundings. Most of us are familiar from our daily professional and charitable work with these two weakening factors.

THE SPECIFIC CAUSE OF TUBERCULOSIS.

The Germ.—The bacillus of tuberculosis is a slender, rod-shaped, slightly curved, non-motile, vegetable micro-organism, about 1/10,000 of an inch long and 1/25,000 of an inch wide. It is an "acid fast" organism, because when stained it resists the decolorizing action of acids. It reproduces itself very rapidly by fission; it is best cultivated in the laboratory in sterilized blood serum at the temperature of the human body; it is destroyed in boiling water in four minutes, but it is not affected by drying or freezing.

The tubercle bacilli usually enter the human system through the mucous membranes of the respiratory or alimentary tract, resulting in localized or general tuberculosis. Infection through a local skin wound may also occur, resulting mostly in local skin tuberculosis or lupus, but the infection may be carried from the local skin wound by the lymphatics to neighboring lymph glands and thence be disseminated through the system.

No tissue or organ of the animal body is exempt from tuberculosis, but the lungs seem to be more often the site of this disease. In maturity and old age the lungs usually become involved when tuberculosis is present anywhere in the

body. This fact is known as "Louis' law." The germs reach the lungs in various ways by direct inhalation of dust-laden air containing tubercle bacilli, by way of the bronchial glands to the thoracic duct, the right lymphatic duct, the right heart and, finally, the lung; by way of the stomach, intestines, lacteals, thoracic duct, right heart and, finally, the lung; by primary infection of one or both tonsils; the germs are then carried through the cervical lymphatics, and by connecting branches direct to the lung, as recently demonstrated by Dr. Robertson, of Chicago, whose paper on this subject is very interesting and instructive, indeed.

In this manner most probably a large per cent. of pulmonary tuberculosis is brought about.

The tubercle bacillus is ubiquitous and very tenacious to life; it is found chiefly in the sputum of consumptives and more or less in all tuberculous lesions; it is also found sometimes in the mouth, pharynx, nose and accessory sinuses of apparently healthy individuals, who are daily closely associated with consumptives.

The sputum of tuberculous patients is harmless as long as it is moist, but as soon as it becomes dry it flies in the air in the form of dust, teeming with myriads of bacilli and ultimately settles upon furniture, floors, walls, draperies, brie-a-brac of the rooms occupied by the consumptive, and from these places it is conveyed back to the air by the broom, the wall brush and feather duster. In the streets dry sputum is rapidly distributed far and wide, and may settle upon non-protected foodstuffs, as milk, meat, vegetables, fruit, etc.

On entering the perfectly healthy animal body the germs have to contend against a group of natural protective agencies, as the circulating fluids, certain wandering and certain fixed cells which possess germ-destroying properties. The battle for supremacy begins and the germs are destroyed before they have time to multiply and exert their pernicious activity. These natural defences are collectively termed "vital force or vital resistance." If the animal or human body is in a state of lowered resistance because of fatigue, previous diseases, various excesses, bad hygienic surroundings, etc., the germs are the victors and man, the pinnacle of creation, falls a prey to the subtle vegetable micro-organism.

PREVENTION OF TUBERCULOSIS.

The battle against tuberculosis is a fight against social misery and the tubercle bacillus.—Prof. Caillé.

In attempting to solve the ever-present problem, "How to prevent and eradicate tuberculosis," one must bear in mind the modes of propa-

gation of the disease, the factors which help to perpetuate it, and the source of the germs, the consumptive. Logically, then, we may ask what can we do or what shall we do for the consumptive to cure him, if possible, and, if not, how can we make his presence harmless to the community and how can we protect healthy individuals from contracting the disease.

The most effective single reform for the prevention of this disease is unquestionably the provision of well-lighted and ventilated dwellings for the poor of the great cities and, to some extent, in our own city. "As long as the poor of the great cities," says Wainwright, "will live huddled together like animals, in insanitary, badly ventilated dwellings, just so long will the disease originate and spread." Hence, the philanthropist who will provide dwellings that permit the ingress to every room, hallway and cellar, of plenty of fresh air and sunlight, dwellings provided with a good water supply, and drainage, will have half solved the problem of prevention of tuberculosis. The home or the house has been named "the granary of the tubercle bacillus outside its host." Flick said: "Were it not for the house, this germ would soon have to perish." Overcrowding, bad light, and vitiated air are its friends; sunlight, fresh air, and water its natural enemies. Exposed to the open air the bacilli will live, but lose its virulence; exposed to the sunlight they live but a short time; but protected from both in the house, covered up by dust and dirt, the bacilli live on for a considerable length of time. How long, I do not know, but certainly long enough to find new victims.

Next in importance is the personal hygiene of the tenants. The shocking condition which we too often see among the very poor need not be described. It is too dark a picture. Most of you are familiar with these conditions from your charitable work. The utter neglect and violation of the rudimentary principles of personal hygiene are due in some families to real poverty, in others to real laziness, indifference and ignorance, and occasionally to prolonged sickness of the wife and mother. To better these conditions we need not only well directed charity, but we need also a campaign of education. We must patiently and kindly teach the poor people, enlighten them, and when they will learn to apply the principles of hygiene to their homes and themselves the benefit will soon be apparent to the entire community in the lessened mortality from tuberculosis.

There are other preventable conditions to attract our attention. The sins of commission and omission are manifold, and child labor is one of

them. Alcoholism is another potent, preventable factor in the propagation of tuberculosis. Some of the French physicians claim that it is the most potent factor, but, to be mild and perhaps just, we will say, with Dr. Wainwright, that "alcoholism is a fruitful factor of consumption by lowering the vitality of its victims who usually drink because they are poor and are poor because they drink." But I do not refer to the ordinate, occasional use of mild alcoholic beverages, which to some people seem to be distinctly beneficial, but I refer to the inordinate, excessive consumption of strong alcoholic beverages, which convert man into an animal and which bring poverty, misery, and so many family disruptions.

To remove this fruitful cause of consumption, we must apply educational methods, not repressive legislation. The pulpit and the press, assisted by the medical profession and by judicious municipal legislation, which we now have, will do more toward the eradication of this enervating, degrading, tuberculosis-predisposing factor than will all blue laws. The Young Men's Christian Association is doing excellent work in this direction by providing innocent games, healthy recreation, popular lectures upon all phases of human life and conduct, intermixed with free concerts, where young and old can spend their leisure hours in wholesome and uplifting surroundings. The same is done by the Jewish Educational Alliance in the large cities and the various branches of the Young Men's Hebrew Association.

THE PUBLIC SCHOOLS.

Tuberculosis in the public schools of the smaller cities does not exist to any great extent. But I have reason to believe that it does exist to some extent. The state owes to our children more than a mere mental education; it must be their guardian and physical protector during school hours. When we consider that the rising generation, the future citizenship, is our country's hope and defense, it is clear that not only must their mental and moral training be wisely conducted, but great care must be exercised to guard them from contracting disease in school. Hence, when a tuberculous child is discovered he should be removed from school immediately for two reasons: first, because the healthy children and teachers must be protected from the disease, and, second, because the tuberculous child must be placed under favorable conditions for a cure. A tuberculous child attending school will not only infect other children, but it must ultimately forfeit its own life for an education.

Consumptives should not be employed or retained as school teachers, but to be fair and just we must demand that teachers who have contracted tuberculosis in the public service should be pensioned and thus enabled to live under conditions favorable for a cure or at least spend the balance of their lives in moderate comfort. The drinking water in the public schools should be clear and wholesome, and the common drinking cups should be discouraged. The sale of *non-disinfected*, second-hand school books should be discouraged. The germ of tuberculosis and other disease-producing bacteria may be found on the dusty pages of a second-hand book.

Smoking for young boys is a pernicious habit, *especially the use of the cigarette*. It predisposes to tuberculosis by lowering the vitality of the body and by irritating the respiratory mucous membranes. Children having nasopharyngeal adenoids and enlarged tonsils should have them removed and thus be enabled to breathe properly through the nose, which is essential to good health. The principles of modern sanitation should be rigorously enforced in public buildings, schools, theaters, hotels, railway stations, etc. The janitors of such buildings should be instructed in a class by the sanitary officer in the proper methods of ventilation, sweeping, and dusting of the rooms in their charge. Dry dusting and sweeping should be discouraged. The dry sputum becomes thereby mixed with the dust and forms an active source of infection. The feather duster should be banished. All furniture, pictures, bric-a-brac, etc., should be wiped clean with a moist cloth.

The anti-spitting ordinance has benefited many communities and it will benefit us also. The public should demand that sleeping cars, steamboat and steamship cabins and staterooms should be frequently disinfected, and the bed linen changed every time the berth has been occupied by a passenger. The existing state laws regarding sanitation in factories and workshops should be enforced. Many are the victims of the white plague that contracted the disease while working at dust-producing occupations, in badly lighted, ill-ventilated factories and workshops.

Consumptives should not be employed in any capacity where the handling of foodstuffs is required. Consumptives should be properly instructed how to dispose of their expectoration according to sanitary methods. A consumptive need not be shunned; his mere breath is not infectious, but children should be kept away from them, for the kiss of a loving consumptive parent may be the death warrant of the child.

There should be a strict supervision of the milk supply of the cities. The cows from which the milk comes must be healthy and certainly free from tuberculosis. Until we are assured of this the only safeguard is the use of pasteurized or sterilized milk. If you will take the trouble to consult the reports issued from time to time by the Bureau of Animal Industry of the U. S. Department of Agriculture, you will see that the danger is not overestimated. Notwithstanding the announcement of Professor Koch in 1901, that in his opinion human and bovine or cattle tuberculosis are two different diseases, the consensus of opinion among scientists and investigators in various countries is that people, especially children, may become infected with tuberculosis from cattle. Cows having advanced tuberculosis will secrete milk containing myriads of tubercle bacilli.

It is, therefore, evident that milk is an important medium for the transmission of tuberculosis. Then, again, milk may become contaminated with the germs in various other ways, by particles of dirt, manure, from dust in the air or from infective particles on the hands of the milker or other dairy attendants. It is self-evident that butter, cream, cheese and ice cream may contain and convey the germs to the consumer, the same as the original milk, plus those that may gain access into the milk products through unclean manipulation.

Only certified milk and meat should be bought and the same should be well cooked.

A superficial sterilization of fruit and vegetables which are to be eaten uncooked may be effected by dipping them in boiling water for five or ten seconds.

THE PREVENTION OF TUBERCULOSIS.

No problem before our nation at present compares in gravity and magnitude to the problem of the possible prevention of tuberculosis. Lawson's "system of frenzied finance": the trust question, the cyclic money market disturbances, the public service corporation question, are insignificant when compared to the question of how can we prevent tuberculosis and blot it from the face of the earth. It is now twenty-five years since the scientific world learned to know the real cause of tuberculosis, the specific germ. Year by year have we studied its morphology and mode of entrance into the human body. Year by year have we discovered and recommended new weapons with which to fight it successfully, and still it exists.

In the year 1899, seven years after the discovery of the tubercle bacillus, 246,000 human be-

ings died from pulmonary tuberculosis in the United States. After eighteen more years of constant investigation and application of preventive measures, we succeeded in reducing the mortality from this disease to 150,000, a fairly good showing. The European countries did no better, Russia hardly as well. But we, the grandest nation on the earth, ought to do better. Is it the fault of the medical profession? No, indeed. The average American physician is just as progressive and self-sacrificing as any of his brethren anywhere in the world. America has been the cradle of many important medical discoveries. The American physician does not only heal the sick, but he teaches people how to be well and stay well, and while teaching preventive medicine he reduces his revenue from the practice of his profession; nevertheless, he continues in this noble work for the welfare of humanity. Medical men, with few exceptions, always stood ready by precept and example, by word and deed, to help humanity rid itself of preventable diseases. Many a well-trained, well-informed and ambitious young medical man gave his life to this noble cause. The same may be said of the allied profession of nursing. When I see young women, after years of study and toil in a general hospital, dedicate their lives to the nursing of consumptives, I can not but admire their self-sacrificing devotion to the victims of the "white plague." No, indeed, it is not the fault of the medical profession that tuberculosis still consumes annually the lives of 150,000 human beings which God made in his own image. It is the fault of our national and state legislators and the public in general, who are in a sort of lethargy in regard to tuberculosis.

As I said before, we have become accustomed to the presence of tuberculosis. It has been with mankind so long that its presence is looked upon as a matter of course. We need an universal awakening to the dangers of the presence and pernicious activity of this subtle germ. We need a National Board of Health, the head of which should be a cabinet officer, clothed with ample power and provided with plenty of money to carry on an active campaign against preventive diseases. We need more funds for our state boards of health. We need national and state sanitariums, situated in suitable localities for curable consumptives and retreats for incurable ones. We need this far more than monumental national, state and municipal buildings, and while we worship God in monumental cathedrals, churches and synagogues thousands of His children die from consumption, a preventable disease, for lack of funds with which to fight this

grim reaper. No, the medical profession does its duty and does it well. It is man's indifference to man that keeps the germ of tuberculosis alive. It is the nation, the state and society that must do its duty now. Here is a problem that philanthropically inclined millionaires can best help solve. Here is an opportunity for them to immortalize themselves on the pages of human history. Here they have the opportunity to erect for themselves far more lasting monuments than libraries and university buildings.

Happily the awakening has begun. State hospitals and sanitariums are springing up all over the country. Our own state is about to erect a hospital for curable consumptives, and the time may be near when the National Congress will take the matter in its own hands and solve the problem. And while waiting for better international, national and state laws for prevention of tuberculosis let us not be idle. Let us engage the attention and sympathy to this cause of the two greatest forces for good on earth, the two greatest molders of human character and public opinion, the pulpit and the press. Let us in this twentieth century forget racial and sectarian differences, let us as children of a common Father unite with bonds of a true brotherhood and sisterhood for a common cause: the extermination of the "white plague."

Let us all do our duty in our respective stations in life to rid the world of this terrible disease, and let us hope that a few generations of active work will bring a harvest of golden fruit of health and freedom from tuberculosis.

Let us look up and not down. Let us look forward and not back, and lend a hand. Let us push forward toward the noble goal set up by Emerson:

"And each shall care for the other,
And each to each shall bend,
To the poor a noble brother,
To the good an equal friend."

THE GENERAL MANAGEMENT OF TUBERCULOSIS.*

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The history of tuberculosis, beginning centuries back and extending through all the subsequent years of our recorded knowledge, reveals to us a scourge which has been constantly consuming the lives of the human race, while the students of science have been studying and fighting

it under many misconceived conclusions. Hippocrates, four centuries B. C., had logical causes for tuberculosis and therefrom based his principles of treatment. Down the ages of time there have been other well-grounded theories, which have met their fate after a few centuries or decades.

From all these researches many of our most important facts were gleaned, but now during the last three decades progress has been so manifold, compared to former years, that it seems that most of them are absolute facts and are a permanent basis for future investigation. This gives the present generation a grand opportunity to decrease the million and a half annual tuberculosis death rate of the world.

You have heard how physicians have heretofore considered this disease ultimately fatal, and how many curative methods and medicines have been lauded, until newer ones displaced them as failures; and that it was a fact that no cure could be made. Such conclusions, while partially true, should no longer be entertained. I want to emphatically say that with impressions of this character the afflicted are inclined to drift about, getting but poor treatment and less advice about proper living.

There is good in well-directed treatment, especially in early cases of tuberculosis, and all patients should be receiving the care and advice of a physician. Medicine or antitoxin could be administered whenever indicated. In no instance should this victim take of medicine without his physician's instructions, because thousands of cases have gone onward toward their doom while taking some "sure cure" for consumption, instead of living a life prescribed for such cases.

What is even more reprehensible is the advice of "Christian Scientists" and "faith curists," who would have the tuberculous patient to disregard his disease and consider it a product of the imagination. These imposters go unpunished by justice for much suffering, loss of life, and family bereavement as the result of their teaching that disease may be overcome by the mind.

Now, before leaving the subject, let me again admonish you that to follow a prescribed course of treatment is a part of a systematized living and will save hundreds of people.

The present-day management is naturally divided into two classes, the climatic and the home treatment. Since the days of Hippocrates the former has been in vogue; people the world around have gone from one locality to another, seeking better health. The good results of this time-worn resource will never be contradicted.

* Read by invitation before the "Monday Night Club" on March 3, 1908. Published by request of the "Monday Night Club."

The change of climate brings new conditions which are generally an improvement upon the patient's original environments, and as a result this individual improves or may become cured. Experience teaches us that most any change of surroundings, food and habit or duty tends to invigorate healthy or sickly people. It is for this reason that short visits or changes within the same locality are accompanied by improvement.

In changing climate much depends upon the altitude, the air conditions and the general surroundings, for some places are suitable to one class of patients and deleterious to others. An example of this would be a case of tuberculosis who has heart trouble, which is made worse in high altitudes.

Financial distress is the chief barrier to climatic changes, it being utterly impossible for most people to stand such expense. Most of such patients can not even pay the transportation expense, while others have enough to keep them a short time and later have to suffer for want and lack of attention in a strange community. It is distressingly true that many such patients become subjects of abject poverty.

I wish to include in this class of treatment public and private sanatoria, because most of them are situated in the mountains or some suitable climate. These institutions are so managed as to produce improvement in most all cases. Here patients get better medical treatment than they can usually get at their homes. They are constantly under the physician's observation, for directing medicine and watching results, for dieting or forced feeding, for gauging exercise, and for all other incidentals which are an integral part of routine treatment.

Proper feeding, when scientifically conducted, is much different from stuffing. While the most easily digested and most nourishing food is the paramount idea, varieties of food are necessary because of their different chemical composition.

Exercise or physical labor are taken with great precision, and with the idea of nourishing and building up tissues of the body, rather than tearing them down. Patients with fever should take none, and after febrile states have passed, exercise is begun, gradually increasing the amount each day. Over-exertion, producing exhaustion, may be deleterious in effect for a week or ten days.

The sleeping apartments are so arranged as to give perfect sunlight ventilation by day and outside air by night. Heat is only used for extreme cold or to obviate dampness. Zero weather does not prevent complete ventilation

and at such times practically one-half to one side wall of a room is open.

Excesses or omissions of any nature are not tolerated and all noxious habits are discouraged. Sports and pastime pleasures come under the strict surveillance of the rules governing exercise.

Hygienic and sanitary measures are inculcated as effectually as such studies are taught in universities. The violation of anti-spitting rules is sufficient cause for severe chastisement, and when repeated it often results in the expulsion of that patient from the institution.

The general training obtained at these institutions is scarcely to be had at any other place. Some one suggests that if tuberculous patients could spend two or three months in some sanitarium they could then return home and live as consumptives should live.

The discussion of home treatment is of the greatest importance, and here exists the principles of our duties in an educational campaign against the disease. This must necessarily be done: 1, by promulgating the doctrine that tuberculosis is a communicable, preventable and curable disease; 2, by disseminating the knowledge concerning the means of prevention and cure of the disease.

As a result of such teachings the public will be aroused to establishing home, state and national hospitals for the afflicted, and the time is near at hand when every state will have such hospitals. Our state has made its first step by the purchase of a site for a tuberculosis hospital. Our next legislative body must appropriate funds with which to build and conduct the institution.

The first step in home treatment, when we have no public or private institution, is to establish and maintain methods of preventing the disease. The best protection against this great white plague is to observe all civic and moral sanitary laws, and to keep the body healthy and strength above par. This necessitates living properly, avoiding noxious habits or habits of excess, and to have plenty of good food and fresh air. Check all sources of spreading the tubercular bacilli; spitting is the chief source, and all people should be taught to avoid this habit of expectorating in public places. Tubercular patients must destroy their sputum by antiseptics or by heat. They must be taught and compelled to carry on streets and in public places some container in which to expectorate. Cups and small rubber bags are now made for that purpose. Expectorating in kerchieves is a compromise and should be discouraged. Spreading germs about the homes is

the cause of the majority of cases. We must make every one realize that as much care should be taken in these cases as is practiced by the individuals of the home when they are confronted by scarlet fever or smallpox. Kissing, using the same kerchief, towels and drinking cups tend to spread the disease, and such habits must be discarded when suspicious cases are in the house.

It would not be superfluous for every family to fumigate their homes at housecleaning time, and in case there are infected members of the family it should be a routine procedure as often as once or twice a month. Formalin fumigation is of the best and is easily accomplished by any one. An antiseptic solution of chlorinated lime, six ounces to one gallon of water, is the best known disinfectant about the home. This is to be used in cuspidors, the toilet, and for washing anything which has been contaminated. This solution destroys all germs in less than an hour.

The most successful treatment is in earlier cases of tuberculosis, consequently an early diagnosis is a necessity. In all cases when people have some continued symptoms, if not in robust health, a thorough examination is demanded. It is here we see the physicians' duty of giving thorough examinations, because this disease in its ineptness is not easily detected. It is also his duty to tell this patient of the existing tuberculosis rather than to encourage him or her by calling it bronchitis or slight catarrh. With few exceptions people must know when they have this disease, so they can at once begin every possible effort to obtain a cure. To be sure, tact must be used in telling this person of his dreaded sickness, lest it distress him unnecessarily. In turn, the patient's duty to the physician is important. He should be obedient and persistent in every detail. This, I am sorry to say, is too frequently not the case. No set of rules can be laid down for all patients, because each has its exceptions.

Fresh air is good for all, and the more of it the better; a case of tuberculosis should have ten hours of outside life during the day. This means out of doors, on porches, verandas or house-tops, when riding or walking is not possible. In zero weather one is as comfortable well wrapped up on the porch as he is indoors. Even on damp or rainy days the closed room should not be sought. Persons who are bedfast can be moved about for the same treatment. I remember when visiting the Liberty Sanitarium in the Catskill Mountains the temperature was 10 below zero, and I saw a young lady lying on a cot on a veranda, reading a book. Inquiring, I found her to be perfectly comfortable. She was well wrapped up,

had a hot water bottle to her feet, wore a hood and mittens, and enjoyed her reading very much. She told me that when she contracted the disease she was living luxuriously in a furnace-heated home. The change was severe to her at first, but now she was recovering and avoided indoor air. This case is only one of thousands. We had a patient dying of the disease in the sanitarium a few years ago; he begged for fresh air and that he be put on the porch where he could die with ease. When put out in the open he got better, recovered, and is still living and is strong and robust.

Sunny air is the best, but in the city the night air is the purest of all. Don't be afraid of it: one window lowered is not sufficient, one wall of the room should be removed, virtually putting the sleeper out of doors. The very fact that the tent colonies at private sanatoria give the most cures is proof positive of the benefit of open-air sleeping. All sorts of tents can be placed in yards. They can be placed on flat-roofed houses. Many make a platform on the slanting roof and pitch their tent. If you have large porches very little work is required to produce ideal open-air sleeping quarters; the yard, however, is preferable when convenient. Next best is sectioning rooms indoors at windows, which is really opening that portion of the room. Why hesitate to breath pure air when it costs you nothing? You pay for unfiltered and infected muddy river water, then refuse to breath pure air which is free of charge. The day has passed when people raise a window about one inch and complaisantly think they have slept in a well-ventilated room.

Nourishment is very important; we all hear that patients must stuff themselves. The idea is to take plenty of food. What applies to sanatoria diet is effectual and proper at home. The importance of the very best nourishment is paramount. It is shockingly true, as has been lately demonstrated in New York, that many hard-working people are poorly nourished, not always because of the lack of food but of the very inferior manner of its preparation by the poor housewife. I want to commend the good work of the Salvation Army in New York City. They have, in a number of instances, established rooms in some poor tenement district and one or two of the Salvation Army girls have devoted their time to teaching these poorer classes how to cook. In our mercenary work we should ever have this in mind, teaching proper cookery. There really is no excuse for ignorance of proper cooking.

In a general conclusion of our subject let me again insist that the work against pulmonary tuberculosis should be systematic and unrelenting, and that it should be incorporated into state laws and city ordinances.

CYSTITIS IN THE FEMALE, ITS MEDICAL TREATMENT.*

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Bacterial infection of the urinary bladder is so frequent and of such common occurrence that all practitioners are interested in the subject. I have chosen the female bladder for discussion because cystitis occurs in the female bladder more frequently than in the male, and on account of the anatomy of the former and its urinary outlet it admits of more thorough and more satisfactory local treatment than the same organ in the male.

There is no disease in the whole rôle of gynecological medicine which can prove more agonizing and more debilitating than a severe case of chronic cystitis. Acute cystitis may be cured by remedies early applied, or even cure itself, but this is not true of the chronic type. The longer the duration of the disease, particularly the more the structural integrity of the mucous lining of the bladder is affected, the more tedious will be the recovery under any form of treatment, and, indeed, in some cases nothing but an operation, hereafter to be referred to, will succeed in affording relief.

When it comes to actual experience in the treatment of this common condition in women, the practical physician is taxed often to his utmost to devise the proper plan for the cure of each case. And when we take into consideration the fact that a severe form of this disease is apt to spread by continuity along the ureters and involve the kidneys, causing an inflammation of these important organs with its serious and often fatal results, we are more anxious to learn all we can of the treatment directed to such cases, and often the opinion of the specialist on the subject is sought with the hope that in some way he may be able to suggest a means of relief to our suffering patient.

The theoretical advice of the text-book is inadequate and often misleading, and the results of experience in one case may be of no value in another. We are told that cystitis is always the result of infection, and however true this may

be, nearly all cases are benefited by the use of bichlorid of mercury.

Our success in the treatment of cystitis depends upon our finding out the particular cause and applying the proper medication, and any treatment which gives any hope of a large average of recoveries, or even improvements, is to be welcomed. In considering the treatment of this intractable disease it is well to divide it into constitutional and local and to remember that each of these will vary according to the cause and characteristic of the inflammation.

We must at the outset so regulate the character of the urine that it will cease to be an irritant to the bladder. The whole body should receive attention and the excretory functions should be stimulated and kept in an active condition. Saline laxatives should be given often to prevent constipation and straining, and any derangement of the nervous system which tends to produce an irritating urine should be investigated and treated. Pain varies in degree of intensity, from slight distress to the most intolerable anguish, and associated with pain is the desire to pass urine every few minutes, although the quantity passed is but a small amount and with the most intense efforts. These two symptoms first brings the patient to our office, and to relieve them is her most earnest plea.

What shall we give to relieve pain? Opium in the form of Dover's powders, or even morphia hypodermically, may be given in order to insure our patient a few hours rest, but these remedies should be given by the physician only. Codein is a safe drug to use, and one quite as efficient, and there is less danger of deranging the digestive organs and kidneys and forming a habit through its continued use. Often it becomes necessary to relieve pain for months and even a year or more. If there is frequent urination and severe tenesmus ten to fifteen grains of bromid of potash and bromid of ammonia, equal parts, repeated as often as necessary, is of much value and often acts as well as opium. Benzoic acid is perhaps one of the most useful drugs to be used in these perplexing cases.

But when the internal administration of medicines fails we must resort to local treatment. I refer to the washing out of the bladder. This method of treatment is very important, and its proper and frequent use very necessary if we expect to handle these cases successfully. It is well to bear in mind that any fluid whose specific gravity is below that of urine will cause pain when injected into the bladder, hence plain water should never be used unless it holds some salt in solution.

* Read before the Union County Medical Society, April 1, 1908.

The technic of washing the bladder in the female is simple, one point of especial importance being to avoid too rapid distension. A fountain syringe with a recurrent catheter may be used, yet I much prefer the ordinary soft-rubber male catheter, to which is attached a small glass funnel; with such a simple device the flow can be readily controlled by raising or lowering the funnel above the patient's abdomen. It is readily cleaned and kept sterile. This operation should never be attempted under cover, not even the introduction of the catheter into the bladder, no matter how dextrous one may become in the use of this simple device. Bubbles of air should not be permitted to enter the bladder, and we must be careful that our solution is at a comfortable temperature, too cold an injection being as harmful as one too hot.

Our efforts to successfully perform this important office for our suffering patient at first may prove futile, but we can usually coax both the patient and her miserable bladder to a degree of tolerance. Some member of the family or a nurse should be taught to carry out this procedure, as it is often necessary to have these bladders washed out two or three times a day.

Having prepared ourselves and our patient for washing, what shall we use? Some text-books advise a solution of cocaine, but this can not be used with safety more than two or three times except at long intervals. Astringents and alteratives are most commonly used. When the urine is alkaline and has been retained for some time, carbolic acid is of use, two minims to the ounce, but in using it it should be freely incorporated with glycerin for the reason that it is apt to float in water as an upper layer and thus coming in contact with the mucous surfaces cause a destruction of the tissues. Nearly all astringent injections should be followed by an injection of a normal saline solution. A favorite remedy, and one which has given me the best results in these chronic types, is the silver nitrate solution, commencing with a $\frac{1}{2}$ per cent. solution and increasing it $\frac{1}{2}$ per cent. each time until a 3 or 4 per cent. solution is reached, following it each time with a normal saline injection and insisting that the patient remain in the recumbent position for at least an hour afterward. This has served me well, and I find that under such treatment it is not necessary to wash out the bladder oftener than twice a week. While recovery may be slow, yet I am inclined to think that it is pretty sure to follow. This treatment has proven so efficient in my hands that I resort to it in preference to all others.

I have not mentioned those cases of cystitis resulting from stone, because of the infrequency of stone in the female bladder. Of course the treatment of this class is obvious to all, removal of the calculus.

If all our efforts after patient and persistent use fail to achieve lasting results, it is because the bladder has not had sufficient rest, and there remains but one course at our command and that is to remove the constant irritation of the hypersensitive bladder by making an opening in the vesico-vaginal septum through which the urine can flow without interruption and the bladder have an opportunity to rest and regain its normal condition. The technic of this operation falls naturally to the surgeon, hence I will not enter into a description or discussion of it.

In conclusion I would say that in handling these cases we must not forget that the great majority are due to some pre-existing cause, and our success in treating these will naturally depend upon finding out the cause and applying the proper medication. And however obstinate and intractable they may be, perseverance and patience should be mixed *ad infinitum* with all our ministrations, for "What wound did ever heal but by degrees"?

CLINICAL LECTURES ON SUPPURATION OF THE ACCESSORY NASAL SINUSES.

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I.

The woman whom we are about to examine is 52 years old and has, previous to her present trouble, been well and strong. The present illness consists in pain over the right side of the face, in the right eye and over the frontal region, chiefly of the right side. She states that for two months she has been unable to breathe through the right nostril, and that for a long time there has been a profuse discharge of pus from this nostril. She also has diplopia. Her physician states that she has had no fever, that her appetite has been only partially impaired, and that, although physically unable, she has been doing much of her house work. We will first examine the physical condition of the affected parts. With the patient's face toward the strong light you can easily detect a marked protrusion of the right eye. You will note that this protrusion is so great that the normal depression beneath the

orbital ridge is obliterated, and that this, when compared with the opposite eye, causes the two to look quite asymmetrical. This bulging of the eye probably explains the double vision of which she has told us.

We should at this point consider all the diseases that may cause exophthalmos. These are: (1) The presence of any tumor in the orbit behind the eyeball, the continued growth of which presses the eye forward; (2) a fulness of the blood vessels supplying the eye, as in exophthalmic goiter; (3) the presence of pus or other fluid in one of the nasal accessory sinuses which lie above, inwardly and below the orbit.

As will be more fully explained later on, it is quite probable that the last of these causes is the one present in this case, for, as stated by the patient, there is a copious flow of pus from the corresponding side of the nose, and until some other reason for the bulging is found we will at least bear the possible sinus suppuration in mind.

In connection with the exophthalmos another interesting point arises. Your knowledge of the anatomy of the sinuses which lie immediately adjacent to the eye will teach you that should pus or other fluid be retained in considerable quantity in the frontal sinus, while the neighboring ethmoid cells and the antrum of Highmore remain unaffected, the pressure of this fluid in the frontal sinus would cause the eye to protrude in an outward direction, but the axis would be turned in a downward direction. If the ethmoid cells are alone involved, and there is much pressure from pus retention, the axis would look decidedly outward, whereas if the maxillary antrum is filled with pus to the extent of causing exophthalmos the axis of the eyeball would point upward. Now if you will examine this protruding eyeball carefully you will be unable to detect any upward, outward or downward pointing of the axis, which fact would indicate that if the protrusion is due to sinus disease the pressure must be one that is equalized, and, therefore, all the above named sinuses, which practically surround the orbit, must be filled with pus, and each must, therefore, contribute to the pressure which causes the protrusion. We are of the opinion that such is the case in this instance, but we must make no positive assertion concerning it until we have made an intranasal examination, and have by that means thoroughly investigated each of the sinuses in question.

In most cases where sinus disease is present to an extent that would cause an exophthalmos there is considerable external tenderness over the sites of the affected areas. We will first make pressure over the seat of the right frontal sinus.

In doing this it is necessary to bear in mind that the size of this cavity varies in nearly every case; that it may be entirely absent, or that it may extend over a considerable portion of the forehead (Fig. 1). When present at all it is always to be found just under the supra-orbital ridge near fronto-nasal articulation (Fig. 1). The ball of the forefinger, when pressed firmly against the tissue in this location, gives rise, as you may observe, to very acute pain. But we also find that there is tenderness on pressure in this case over a very considerable portion of the forehead, and we should, therefore, strongly suspect a large, diseased frontal sinus.

The next step in a systematic examination is to ascertain the condition of the nose and the adjacent accessory sinuses. The patient is, therefore, placed in a darkened room by a good artificial light, which latter is reflected into the nostril. The lower turbinate is swollen and bathed

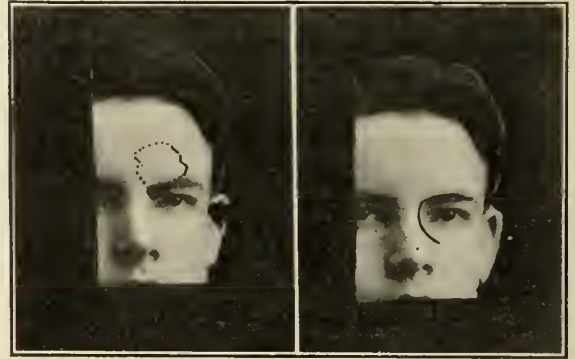


Figure 1.

Figure 2.

Fig. 1.—Showing the most constant site of the frontal sinus (designated by the circle at the inner end of the eyebrow), and also the height and width to which the sinus extended in an individual case—shown by dotted lines.

Fig. 2.—Line of primary incision of soft tissues.

in creamy pus, which flows down from the middle meatus. The middle turbinate is crowded tightly against the nasal septum and the adjoining ethmoid cells bulge against the turbinate, showing that there is pressure within. When the pus is mopped from the middle meatus it reappears immediately. There is no doubt an empyema of one or more sinuses, and the practical questions which must be settled are, is more than one sinus involved, or is only one diseased? If but one, which one? It is impossible to decide from the mere presence or appearance of pus in the middle meatus as to which accessory sinus is affected, for the reason that all the accessory spaces, with the exception of the posterior ethmoidal cells and the sphenoidal cavity, empty into the middle meatus near the same place. The patient states that the pus always flows from the

anterior naris, and this fact, taken in connection with what can be seen as to the point of exit of the pus, enables us to decide that the sphenoid and posterior ethmoid cells are probably not involved. As previously stated, the bulging of the anterior ethmoid cells indicates that these are diseased. We will now pass a Myles' exploratory trocar and canula into the antrum of Highmore, as near as possible through the ostium maxillaire, and by injecting a sterile solution into the antrum through the canula will be able to wash out any accumulated secretion which may be there. You may now note that the return flow from the canula contains a large quantity of pus, and you who will come close enough can detect that it has a foul odor. Adding these positive symptoms to those previously studied, there remains no doubt concerning the diagnosis; there is also empyema of the maxillary sinus.

Owing to the blocked state of the attic of the nose we shall be unable to employ means just now which will enable us to be so positive concerning the condition of the frontal sinus, for, as you have been previously taught, it is not always an easy matter to irrigate the frontal sinus through the natural channel—the infundibulum—and in the present condition of this nostril it would, in my opinion, be impossible until a portion of the middle turbinate is first removed. However, the swelling which we have observed over the external walls of the sinus, together with the local tenderness of the region to pressure, leads us to the rather positive conclusion that the cavity is diseased. We will, moreover, transilluminate all the sinuses and perhaps secure a skiagraph of the same in order to make a complete record and a more certain diagnosis. From our present examination of the case we are, however, entirely justified in making a diagnosis of chronic empyema of the frontal, ethmoidal and maxillary accessory nasal sinuses.

Concerning the treatment, this case could undoubtedly be improved by removing the anterior half of the middle turbinate, biting away the anterior ethmoidal cells with forceps, and thus providing a better drainage for the affected sinuses. The condition is, however, such an extensive one, and the amount of pathologic change within the cavities so great, that cure by any intranasal method would probably not be possible, even after prolonged treatment. To cure this disease would require radical measures, and the best operation yet devised is that known as Killian's. We will, therefore, send the patient into the hospital, and as soon as she can be properly prepared for it we will perform the Killian frontal sinus operation, which in this instance will also necessitate

opening the maxillary antrum at the same time and dealing with its disease in a thoroughly radical manner.

II. THE KILLIAN OPERATION.

This is the patient you had opportunity of examining in the dispensary two days ago. At that time we made a diagnosis of empyema of the frontal and maxillary sinuses and the anterior ethmoidal cells of the right side.

The purpose of this operation is to rid the patient of all suppurating or other pathologic foci, and hence it will be necessary to remove from the various cells and sinuses involved all diseased mucous membrane, to break down and remove every bony septa dividing the sinus, to hone smooth every area of osseous necrosis, and finally to leave all the cavities smooth and free from pockets, to the end that healthy granulation tissue may spring up and the sinuses may be healed by the approximation of non-suppurative structures. This will necessitate a wide opening into each cavity, since otherwise we should be unable to see into every nook and corner that is diseased, and should we fail to properly attend to every diseased area, failure is certain to follow our operative effort.

The field of operation has been sterilized in the usual way. Killian advises that the eyebrow be not shaved, but to do so seems more surgical. The first incision is made from the external end of the orbital ridge, through the center of the eyebrow to the fronto-maxillary articulation, and thence along the side of the nose to the lower part of the base of the nasal bone (Fig. 2). This incision goes only through the skin. The next stroke of the knife follows the first and penetrates to, but not through, the periosteum. With a sharp periosteotome the structures are slightly reflected above and below the line of incision, laying bare the periosteum. A third incision is now made parallel with the supra-orbital ridge from its outer angle, to the naso-frontal articulation, and one-fourth inch above the line of the skin incision (line A B, Fig. 3). The periosteum is now reflected upward from the entire area of bone over the usual site of the frontal sinus, but that lying below the periosteal incision toward the orbital margin is left attached to the bone for the reason that, as will shortly be seen, a narrow bridge of bone above the supra-orbital ridge is to be left intact in order to prevent sinking-in of the soft tissues and consequent deformity subsequent to the operation.

The nasal portion of the track of the periosteal incision begins at a point just under the supra-

orbital ridge, and slightly internal to the supra-orbital notch, and is continued toward the skin incision, which line it joins, and is carried downward to the same distance (Line C D, Fig. 3).

The periosteum is now reflected on either side of this incision, exposing the floor of the frontal



Fig. 3.—A B, line of incision through periosteum above bridge. C D, line of incision through periosteum under bridge. The dark area at C shows opening into the frontal sinus through its floor.

sinus and the outer wall of the anterior ethmoidal cells. To be more exact, the lacrimal bone, the nasal bone and the nasal process of the superior maxillary are laid bare. In reflecting the periosteum great care is necessary to be observed not to disturb the tendon of the superior oblique muscle at its point of attachment just under the supra-orbital notch and not to rupture or otherwise injure the lacrimal sac in reflecting it from its position in the lacrimal groove.

We will now proceed to open the frontal sinus. You will remember the statement made at our dispensary clinic that the most certain point at which this may be done is just below the supra-orbital ridge, at its superior internal angle (Figs. 2 and 3). The first stroke of the gouge penetrates the thin plate of bone here, and you can note the black, thick-looking mucous lining of the interior of the cavity. We now incise this membrane, and you see welling up, as if under considerable pressure, yellow creamy pus in great quantity. I insert a probe in order to determine the extent of the sinus, and thus demonstrate that this one extends far in every direction. We will, therefore, remove the external osseous wall of the whole sinus above the supra-orbital margin, with the exception of the bridge of bone which I have already mentioned, and

upon which the periosteum has been left intact (Fig. 4). We use first a Killian V-shaped chisel (Fig. 5) with which it is easy to cut a deep furrow above the bridge of bone, from the inner to the outer limitations of the sinus. With stout bone forceps the entire outer covering is now quickly ablated, and with a flat, sharp chisel the osseous margins are carefully smoothed and beveled. We next flush out the remaining contents of the sinus with hot saline solution and inspect the walls of the cavity most thoroughly. You will notice several bony septa which partially divide the interior of the cavity into several compartments, and these we must remove to their bases and hone away every roughened edge and diseased portion of the mucous lining. The outer angle of this sinus is quite irregular and forms a pocket which, if overlooked, would retain subsequent secretions and prevent a good result from the operation; hence it must be given special attention, be thoroughly curetted, and be left in a perfectly smooth and aseptic state. We will next examine the infundibulum, the natural channel connecting the



Fig. 4.—A B, lower edge of opening into frontal sinus. C, bridge of bone with periosteal covering which is left intact above the orbit. C D E, boundary lines cut with curved chisel, of nasal process which must be resected.

frontal sinus with the nose, because the most perfect operation that can be done on the sinus will fail unless this natural drainage tract be left widely open and free from disease. A polypoid mass fills this channel in this case, and this we will remove by means of the eurette, but will

leave the final enlargement of the duct until a subsequent step of the operation.

Before leaving the frontal sinns we must not fail to inspect the osseous septum which separates the operated cavity from its fellow of the opposite side. In this instance the septum is



Fig. 5.—Killian's straight v-shaped chisel.

partly broken down, and hence the opposite sinus is undoubtedly diseased and will likewise need the radical operation. We will, therefore, repeat the incisions on the left side, following exactly the plan already executed upon the right. On removing the entire outer wall we find that the left sinus is almost as badly diseased as the right, and hence we will clean it out in the same thorough manner as the right, and will drain it chiefly through the infundibulum, which we will shortly enlarge very much for that purpose. We will at this point pack both frontal sinuses with



Fig. 6.—Shows the amount of resection of bone necessary in Killian operation. W, cavity of frontal sinus, the anterior wall of which has been removed. Y shows the window into nasal cavity resulting from the removal of the nasal process and lacrimal bones. X shows bridge of bone above orbit, left intact to prevent deformity.

sterile gauze, and will proceed to the next step of the operation, namely, the resection of the frontal process of the superior maxillary bone, the lacrimal bone, and orbital plate of the frontal bone, in so far as the latter forms the floor of the diseased frontal sinns (see Fig. 6).

You will observe that in reflecting the periosteum and superimposed soft structures from the inner segment of the orbit that the eyeball is necessarily displaced outward, and that injury may be done to this organ unless some provision is made for its protection. Killian has devised a protector for this purpose (Fig. 7) and this should now be used to draw the orbital structures outward and away from the field of the proposed resection of bone, while at the same time it forms a shield against possible violence from the necessary manipulations in chiseling the bone away. The first step of the osseous ablation consists in incisions through the bone such as will partially bound the field to be resected. These are best made by means of a bent Killian V-shaped chisel (Fig. 8). The first incision is begun by placing the chisel at a point near the lower end of the naso-maxillary suture and then driving it upward along this suture to near the naso-frontal junction, at which point the instrument is directed outward to a point midway between the supra-orbital notch and the attachment of the superior oblique muscle. This groove should penetrate entirely through the thickness of the bone, and will,



Fig. 7.—Killian's curved protector.



Fig. 8.—Killian's v-shaped bent chisel.

therefore, expose the underlying mucous membrane throughout its entire extent. From the lower end of this osseous groove we will construct a second one as far outward as the lacrimal groove. You will note, therefore, that the part to be resected has been pretty completely surrounded (see Fig. 4, line C D E), that it becomes an easy matter to remove the desired portion of bone with the bone forceps, and thus to construct an ample window through which easy access is gained for dealing with the middle turbinated body and the ethmoidal cells. The nasal mucous membrane which underlies the lower portion of this resected portion of bone should, when possible, be saved for the purpose of constructing a flap from the same, which flap can be made useful by its reflection and application to the adjoining denuded orbital tissues. This membrane is in this case, however, so badly diseased that no attempt will be made to preserve it, and we, therefore, bite it away with forceps and expose the anterior region of the ethmoidal structures

on this side, all of which it is desirable to remove. Several different sizes of the Grünwald-alligator-jawed biting forceps are necessary and useful for this purpose, and you will observe how rapidly these diseased structures are by this means ablated. The bleeding from the parts thus attacked has become so free that it becomes necessary at this point to pack the cavity with adrenalin gauze tape for a minute or two, during which time we may with advantage clean up the field of operation and prepare to use reflected light for the illumination of the rather deep cavity we have already made into the ethmoid. A common head mirror may be used for this purpose, and by means of reflected light, now that the gauze is removed from the wound and the hemorrhage has ceased, it is easier to see the structures with which we must deal, and hence the remaining work may be finished more thoroughly and safely.

The diseased ethmoidal structures being now satisfactorily dealt with, the remaining portion of the floor of the frontal sinus must be removed, which, as you already see, as the plate of bone is chiseled away, provides a wide passage between the frontal sinus and the nasal cavity (see Fig. 6).

The preceding step completes the Killian operation with the exception of the introduction of the sutures and the adjustment of the flaps, and upon the accuracy of the performance of these will depend whether or not much scar will result. Killian advises the use of aluminum bronze wire sutures, but we shall use small silkworm gut in this case as a matter of convenience. Before tying the sutures we will flush the entire wound with hot saline solution, will then dry the same with sterile gauze and will dust the cavity with iodoform powder. Formerly it was thought advisable to pack the frontal sinus lightly with iodoform gauze and to bring the lower end of the gauze strip out from the nostril, removing the same by traction on the second day. It has been found, however, that the sinus does as well, if not better, in cases where such a gauze packing is omitted, and hence we will in this case insert the iodoform tape only as far as the greatly enlarged infundibulum and allow the end to protrude slightly from the nostril. We shall also tie all the sutures and thus completely close the external wound.

You will remember that the antrum of Highmore is, in this case, also diseased and should be dealt with radically. We therefore protect the wound already made by covering it with gauze, and will proceed to remove a large portion of the anterior wall of the maxillary antrum above the

alveolar process. Upon the incision of the soft parts above the teeth, and their reflection upward, it is found that the anterior osseous wall of the antrum is carious, and that the periosteal elevator has already penetrated into the antrum. It is only necessary, therefore, to cut away the soft parts sufficiently to reach the healthy osseous margins and to give free access to the interior of the cavity. With a stout, sharp curette we shall now remove the entire diseased contents and then break down a passage of ample size for good drainage into the nasal cavity. This accomplished, it remains only to pack the cavity



Fig. 9.—Shows result of Killian operation three weeks afterwards.

lightly with iodoform gauze. Since trivial injury or infection of the eye may have occurred we will complete the operation by dropping a drop of a 1 per cent. solution of atropin into each eye before applying the bandage.

Exhibition of case two weeks after operation.—You will now note the result of the radical frontal sinus operation (Fig. 9). Union by first intention has everywhere occurred, the diplopia has disappeared and the areas of external tenderness are gone. The patient eats well, sleeps well, has normal temperature and is discharging but a slight amount of pus from the nose. The resulting deformity, as you may observe, is not marked.

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EDITORIALS**A PLEA FOR UNITED ACTION AGAINST QUACKERY.**

Is it not about time that the profession of Indiana should arouse from the lethargic state into which it has lapsed in the campaign against quackery and the nostrum evil? What has it beyond a few lukewarm resolutions scattered here and there throughout the state, to show that it is really in earnest in its desire to rid the public of these nuisances?

In the State of Kentucky there is not to be found a single quack practicing medicine. This ideal was not accomplished in a day or a year but by the active perseverance of a well-organized profession which left no stone unturned in the uprooting of the evil. There is not a single one of these advertising scoundrels who is not fully aware of the fact that he is publishing one or more lies every time his subsidized paper or journal goes to press. He knows that he is making many promises that he can not fulfill, guarantees that he can not execute, and instead of openly forfeiting the fee in case of failure to cure, as he promises, connives and schemes in every possible way to find a loophole of escape. Doubtless there are a few of these irregulars who have no little ability and could render considerable service to mankind, and for that reason an injustice might be wrought by revoking their licenses. But fortunately the general profession is broad enough to open wide its doors and allow these men to enter on an equal plane with all, if only they are willing to give up their false claims and dishonest practices. Naturally there is a certain amount of instinctive aversion in every honest man's breast to giving his hand in friendship and brotherly affection to one whose sense of modesty has been so lacking as to scatter broadcast his pictures and self-praises merely because of the greed for financial gain, but this must be buried. The results attained by the conscientious, hard-working physician are sufficient testimonials to his skill and will speak for themselves, but the grafter and the pretender

will ever have to buy his praises, and through the medium, too, of publications of about the same caliber as himself. The newspaper which gives space (and always for a consideration) to a false guarantee is equally culpable with the guarantor and should be held equally guilty of obtaining money under false pretenses, the penalty for which is prescribed by the law.

It is earnestly to be hoped that the coming session of the Indiana State Medical Association will not pass without an earnest effort to inaugurate a campaign against these abuses that shall never cease until they have been wiped from the face of our fair state and Indiana has taken her rightful place among the first of the nation in medical ethics and practice. To accomplish this end means that each and every one of us must get out and work; work with one another, with our newspapers, with our legislators and with our ministers. If only we can educate the people to realize the enormity of these frauds the public demand will be created and then victory will be easy. Let us no longer shirk a duty on to lay publications, such as *Collier's Weekly* and *The Ladies' Home Journal*, that should be fulfilled by the medical profession, a body more capable, and whose true function it should be to keep the public informed concerning and protected from such rank abuses.

A MEDICAL BUREAU OF PUBLICITY.

If we adhere to the ethical traditions of our profession we are prevented from making the profession of medicine what in part it is intended to be, an educational agency for the dissemination of knowledge which shall tend to prevent disease. By our reticence we permit many misconceptions and misapprehensions to be a source of injustice to us as well as the public at large, and commercial interests, profiting by our reticence, assume to teach and form opinions for the public for private gain. The question arises, are we not doing the public, our profession and ourselves an injustice in being entirely governed by ethical principles which restrict our sphere of usefulness as medical advisers? Concerning this question Dr. J. M. Taylor, in a paper presented before the Philadelphia County Medical Society at its meeting of Jan. 22, 1908 (*Medical Notes and Queries*), has the following to say:

"Above all, we should aid in promulgating right conceptions of the advances in medical science. The agency we must use is the public press. Here, upon this recognized arena, with

the great body of thinking people as audience, must we stand to win or lose on truth as our inspiration, on ethical principles as rules of the competition, on our sincerity of purposes to benefit our fellow-man as the banner of our cause. In my opinion it is necessary to meet modern conditions by adopting modern methods. Every form and kind of opponent to the purposes and efforts of the profession make use of the newspapers to reach the attention of the people. The whole crews of fakers, grafters, panderers to evil amusements, vendors of disguised poisons, and all the disseminators of hurtful influences employ vast sums of money through press agents of one kind or another. The one available means of combating these destructive agencies is for organized medical bodies to establish bureaus of publicity, safeguarded by competent committees, through which information, opinions, action shall be accurately and systematically supplied to the papers. The public are made fully aware of every tempting method of doing themselves harm. We, as a profession, fail to exert the counter influences which ought to impress the consciousness of those who need our protection.

"I would propose the establishment of Medical Bureaus of Publicity in connection with all county medical societies. A reliable press agent should be retained. Many and varied reasons can be adduced why these are absolutely essential to secure a correct presentation of facts bearing upon the integrity of medical science and the best interests served by the conservators of public and private health. Among the most important of these is the well-known fact that all those interests which are diametrically opposed to medical ethics do employ press agents. With them it is a question of business. Good business methods demand that the public shall be made acutely aware of the more attractive phases of the proposition offered. These fakers have goods to sell, advice, or whatever they wish to barter for money. The chief avenue of diffusion is the daily press, through the ordinary channels of advertisements or shrewdly placed news items. For example, as is well known, the great nostrum vendors expend many millions of dollars annually, and through the intelligent co-operation of professional press agents. These constitute practical Bureaus of Publicity for Quackery.

"No organized medical body in the world spends one cent for popular education, to 'put the people wise' on questions it is their desire and duty to have correctly understood. Yet a large and increasing group of irregulars do spend vast sums to mislead the unwary, thereby

causing incalculable damage to morality and health.

"Teaching mankind systematically and accurately how to know good from evil, right interpretations of current facts, advancements in scientific knowledge of hygiene, correct living and acting, should be the undivided purpose of the profession of medicine. The first step is to get the real facts known, to teach the people correctly what we are doing for their welfare, to furnish information of a kind calculated to advance the best interests of the race. The form and character of such bureaus of publicity should be carefully formulated. Rules to govern methods, however, should be revised promptly and repeatedly, until by intelligent evolution, consonant with experience, they shall become perfected."

SKILL IN ANESTHESIA.

At a recent meeting of the Medicolegal Society in London the question of deaths under anesthetics was discussed at some length and a resolution forwarded to the General Medical and Privy Councils recommending that instruction in the administration of anesthetics be among the requirements for professional training. The present method was declared to be antiquated and slipshod, as under it any person may administer an anesthetic, no matter whether he is qualified or not. Furthermore, if the anesthetizer performs his function to the best of his ability and with no unlawful motive he is not liable to punishment or blame if the patient dies as a result.

Ordinarily it would be difficult to determine whether an anesthetist were acting to the best of his ability unless he were palpably guilty of some gross neglect or error, and this for many reasons, chief among which is the fact, oft stated, that every subject for anesthesia is a law unto himself. Hence it is that the man of sound judgment and wider experience is bound to be more ready to meet the emergencies and variations as they arise.

The careful surgeon is likewise careful in the choice of his anesthetist, for no operator can do his best work when his attention must needs be divided between his work and that of another, be it anesthetist, assistant or nurse.

In no line of medical work more than in anesthesia is the student or practitioner impressed with the total inadequacy of text-book descriptions for meeting the exigencies at hand. The amount of anesthetic or the time necessary to

induce narcosis in one subject is no criterion as to the same factors in perhaps the next case; the various stages may vary very materially in two successive instances; the mental state, which, by the way, is no negligible quantity in anesthesia, may be altogether different in one individual about to undergo operation from that in the one to follow; the physical condition and previous habits of the subject at hand will not present in the next case. All these and many other subjects must of necessity be treated in text-books in a more or less generalized fashion and the anesthetist is left to work out his own salvation and occasionally at the expense of the patient.

Commensurate with the more recent and broad strides made in surgery has been the progress in its right hand bower, anesthesia, so that he who may have been considered proficient twenty years ago would probably awake to find himself woefully behind in present-day methods of inducing anesthesia.

So that nothing could be more conducive to the making of a skilled anesthetist than a thorough course in practical anesthesia in college, supplemented by actual training under the supervision of an experienced man before entering into this very important yet sadly abused field.

Were the same amount of training required of the anesthetist that is demanded of the surgeon, specialist or laboratory man, there would be fewer deaths from anesthesia to be recorded, more men making it a life work and less cause for complaint about the insignificance of the compensation for services rendered.

A WORD TO COUNTY SOCIETY SECRETARIES.

In the April number of *THE JOURNAL* we called attention to the action of the Council in co-operating with the American Medical Association in an effort to increase the membership in the county, state and national medical organizations. According to the plan decided upon Indiana is now being canvassed by trained and responsible men who call upon all doctors in the state who are not at present members of any county medical society but eligible to membership, and solicit applications for membership. The canvassers are directed to first report to the councilors of the several districts, and then to the county society secretaries, for suggestions and advice, and they are not expected to secure applications from any physicians who are not eligible to membership in any of our county

societies. The canvassers are requested to collect dues when applications are taken, whenever possible, and to turn the same over to the county society secretary, who should also promptly remit the state association assessment to the secretary of the state medical association after the application has been favorably acted upon.

The canvassers should be given every possible encouragement and assistance with a view to securing the best possible results from their efforts to increase the membership in our county societies. To make the work more effective a sample copy of *THE JOURNAL* and a letter soliciting application for membership in the county society is sent from this office to every eligible doctor upon whom some canvasser is to call. If county society officers will also assist in the work while the canvassers are in this state we ought, by our combined efforts, to add at least six or seven hundred names to the membership list of our state association. We, therefore, urge the county society secretaries to join in the movement with earnestness and a determination to make the most of the opportunity offered for advancing the cause of medical organization.

EDITORIAL NOTES

REMEMBER that the State Association meets at French Lick, June 18 and 19.

THE next number of *THE JOURNAL* will be in the hands of the members a week before the French Lick meeting.

EXCEPTING Illinois, the largest state representation at the Chicago session of the A. M. A. should be from Indiana.

SPECIAL music written and dedicated to the American Medical Association. That is on the program for the Chicago session of the A. M. A.

THE preliminary program for the French Lick meeting is published in this number of *THE JOURNAL* in the department devoted to society proceedings.

C. S. ROBERTS, M.D., of New York City, is again writing the doctors of Indiana asking them to send 15 cents to cover postage on a

"free \$3 sample" of "hydrocine" for use in treating tuberculosis. We hope that no suckers will be found in Indiana to bite at this nostrum bait.

THE June number of THE JOURNAL will be the French Lick number. It will contain much interesting and useful information concerning railroad rates and connections, hotel accommodations, entertainments and program for the annual session of the Indiana State Medical Association.

TRAINED and accredited canvassers are now soliciting applications for membership in our county medical societies. Every county society officer should assist these canvassers in this work. A letter here, a telephone message or personal interview there, may be the means of securing applications which otherwise would not be secured.

SEVERAL county society secretaries in Indiana are dead. Cause of death, laziness or indifference, or both. Some have always been dead. They were corpses when elected and decomposition has set in. It is time to bury or burn them. Some ought to be burned in effigy. Nothing can be expected from resurrection, as we have tried it. Close up the line and fill the vacancy.

THE *Journal of the A. M. A.*, March 28, pricks the Burnham's Soluble Iodine bubble. Careful and painstaking analysis shows that the claims put forth by the manufacturers of Burnham's Soluble Iodine do not hold good. The preparation is very similar, if not inferior, to Lugol's solution (*Liquor Iodi Compositus*, U. S. P.), which is an inexpensive and perfectly available preparation.

THE time will come when alcoholism and drug addiction will be considered as diseases worthy of some consideration on the part of the state. The segregated treatment of inebriates as diseased persons has already proven effective, and legislative bodies should favor the establishment of hospitals where the victims of alcohol and drugs from the poorer classes may be properly treated at state expense.

IN unity there is strength. Doctors need to be impressed with that fact. If the doctors work together there is no commendable object which they can not obtain. Nothing tends to bring more harmony and unity of action among medi-

cal men than association in a live and progressive medical society. It is the duty and should be the pleasure of every reputable doctor in Indiana to give his active support to his county and state medical organizations.

THE cure for the nostrum evil is the inculcation by medical teachers of the maxims of Hippocrates and their own discontinuance of prescribing secret preparations, the use of the Pharmacopeia as a text-book in medical schools, the immediate emptying of samples of secret nostrums into the sewers, a better education in therapeutics, and an insistence that the prescriber of secret nostrums is a dangerous quack, who commits an actual breach of trust.—John B. Roberts, M.D., *Journal of the A. M. A.*, March 21, 1908.

INDIANA will not go to ruin, no matter which of the leading political parties wins in the coming election, but it makes a great deal of difference to medical interests as to which Republican and which Democratic candidates for state offices are elected. Therefore, the recommendation of the Council of the Indiana State Medical Association, to the effect that candidates for office shall be interviewed as to their attitude on questions of special interest to the medical profession, should be followed in every county and district in the state. THE JOURNAL will publish the results.

WE wish to again remind contributors to THE JOURNAL that copy should be typewritten. Our printers very properly refuse to accept anything but corrected typewritten copy, and with typewriters so common in even the smallest towns and villages it is unnecessary for any contributor to send us an original article or letter for publication the copy for which is not typewritten. The average doctor may think that it is easy to read his writing, but printers do not think so. Therefore, we respectfully ask that articles sent us for publication be typewritten and corrected before sending.

HAVE purely medical papers gone out of style? We hope not, and yet it would seem so if we can judge by the large number of surgical papers and the very small number of medical papers offered us for publication in THE JOURNAL. It would seem that every man who does a little surgery as well as every man who does a good deal of surgery considers it his duty to write and discuss surgical subjects only. The time is coming when the internal medicine man is go-

ing to have his day, but we wish we could begin to see more evidence of it in the manuscripts sent us for publication.

WHATEVER may be the shortcomings of our National Senate, their treatment of the bill providing a pension for the widows of Drs. Carroll and Lazear has proven that there still remains in that august body a humanitarian spirit that must be a source of no little satisfaction to all to whom this story of patriotic self-sacrifice is familiar. And to the further glory of the Senate be it said that the bill was not only passed by them, but unanimously so. May the House of Representatives throttle their tyrannical speaker for the once, at least, and follow the noble example of their fellow legislators.

THROUGH intention or ignorance, usually the latter, many doctors fail to recognize smallpox, and as a result the disease spreads with great rapidity until great damage is done to public health and commercial interests. Why not admit unfamiliarity with the disease and leave the diagnosis to experts, meanwhile taking all the usual smallpox precautions until the diagnosis has been conclusively established. Some doctors are seemingly afraid to admit that there are any conditions under which a diagnosis can be in doubt, as they are also unwilling to admit that there is anything concerning the theory and practice of medicine which they do not know. All doctors should know that the public thinks none the less of a man for admitting the possibility of error and will always approve of frank honesty.

WILLIAM J. BRYAN'S *Commoner* is guilty of accepting money for advertising medical frauds. Mr. Bryan probably numbers several thousand subscribers belonging to the medical profession, and if these subscribers will, each and every one, write Mr. Bryan to the effect that support of the *Commoner* will be withdrawn unless that paper ceases to advertise medical frauds it is quite likely that "the peerless one" will take some notice and perhaps free himself of the odium attached to acceptance of money from those who are using his paper to deceive and defraud. The letter from Dr. Hoover, printed in this number of THE JOURNAL, indicates that one man has taken the proper stand in this matter, and we hope that there will be many others among our readers who will follow the example, now that the question has been brought to their attention.

SEVERAL A. M. A. canvassers are working in Indiana now in an effort to secure new members for our county societies and the A. M. A. The work is being delayed and interrupted by the failure of some county society secretaries to aid the A. M. A. office in securing complete and reliable lists of physicians, with designation of those who are not members of county societies, but eligible. It is of the utmost importance that the canvassers have accurate lists, and the easiest and the most satisfactory way to secure such lists is through the county society secretaries. We sincerely hope that the cooperation and assistance requested will be freely and promptly given. If every county society secretary will do his part the county societies of the state will add from five to six hundred new names to the membership list of the state association within a few weeks.

THE time is rapidly approaching when the medical journals that now carry nostrum advertising will have to quit the practice or go out of business. Medical men as a class are not going to tolerate much longer such prostitution of medical journalism as is evidenced by an inspection of the advertising pages of many of the medical journals of the country. When medical periodicals advertise such preparations as "Bromidia," "Antiphlogistine," "Tongaline," "Sanmetto," "Glycothymoline," "Vin Mariani," "Pepto-Mangan," "Listerine," "Hydrozone," "Antikamnia," "Syrup of Figs," "Anasarcin," "Glyco-Heroin," "Alettris Cordial," "Vapo Cresoline," "Ethal," "Tongaline," "Cactina," "Peacock's Bromides," "Seng," and many other nostrums which might be named, it is time for the intelligent and conscientious physician to refuse to support, either directly or indirectly, such publications.

THE quack doctor and the patent medicine manufacturer thrive because they are able to delude the public through skilful newspaper advertising. Take away the newspaper advertising and the quack doctor and the patent medicine manufacturer would go out of business. The newspaper editors and managers are satisfied to share in the graft derived from this imposition upon the public. The newspaper men excuse their action on the ground that they can not be expected to discriminate between the good and the bad, but this is pretense, for they know that all advertised remedies are either useless or positively harmful and that all blatant advertising doctors are frauds. It is a case of sharing in the spoils which prompts newspaper men to

continue a business policy which they know is morally wrong. The practice will not cease until public sentiment demands it, and then the newspapers will be loud in denunciation of the evil.

METSCHNIKOFF and Roux recommend a calomel ointment composed of 33 grams of calomel, 67 grams of lanolin and 10 grams of vaselin as a local application after coitus for the prevention of syphilis. Their conclusions are based upon experiments on man as well as animals. Injections of atoxyl are also said to prevent infection, though the remedy is not without danger to the optic nerve.

Perhaps calomel ointment will become one of the toilet accessories of residents of the red light districts in our large cities. It is difficult to predict what the effect will be upon morals, but if innocent wives are saved from inoculation with syphilis contracted by dissolute and unfaithful husbands, and the number of cases of congenital syphilis is lessened, we can afford to overlook the effect upon morals. The discovery is also of value to physicians, dentists and nurses who come into contact more or less frequently with syphilitic patients.

THE Indiana Board of Medical Registration and Examination has been particularly liberal in some instances in not only granting temporary permits to practice medicine in the state, but in extending the permits far beyond the time which the holder of a temporary permit should have. It is strange that permits of any kind should be issued, as it is also strange that the men who have been allowed to practice for long periods of time on a temporary permit should be some of the notorious quacks of the state. All of which reminds us that the State Board of Medical Registration and Examination is entrusted with the enforcement of the Medical Practice Act and instead of helping the quacks the Board should go after them. In prosecuting and driving from the State the "Boy Phenomenon" they have shown what can be done. But something more than a spasmodic action of this kind once in a great while is required of the Board, and the medical profession would like to see the Board fulfill the requirements of office.

SOME doctors are human vultures seeking whom they may devour among the sick and suffering. This was demonstrated during the recent terrible hotel fire in Fort Wayne. When a

majority of the physicians of the city were giving every possible assistance to the work of caring for the burned and otherwise injured victims of the fire, with no thought of anything but means and measures for affording relief, one or two doctors, with a view to personal advantage and gain, were assuming unwarranted authority and exercising undue control over the sufferers with not the slightest sense of respect for the feelings of the victims or the numerous confrères who labored from a sense of duty and not for personal gain. The Lord may bestow pity upon such medical pirates, but we believe they merit the contempt of those who follow the teachings of Hippocrates. We take special pleasure in saying that a very large percentage of the doctors of Fort Wayne are heroic, self-sacrificing, charitable, capable and respectful of the rights, privileges and honor due others. It is to be regretted that there are any exceptions, but there are a few, and perhaps in that matter Fort Wayne is no worse than any other city of similar size, for it is probably true that "there are black sheep in every flock."

MEDICAL appointments to positions on our various state boards and in our penal and benevolent institutions should be divorced from politics. The highest efficiency can never be attained when medical appointments are dealt out as political favors and irrespective of fitness of the appointee for the position to which he is appointed. For the most part Indiana has been fortunate in having medical men of ability and unusual fitness appointed to the various medical positions under state control, but there is room for improvement and it is hoped that the next governor will be sufficiently impressed with the importance of this subject to warrant consultation with the medical profession regarding any and all medical appointments. There is no reason why appointments should not be made from a number of physicians having the recommendation and endorsement of the leading state medical organizations. Had this plan been followed when the members of the present Board of Medical Examination and Registration were appointed, the complexion of the Board would now be different and we believe the efficiency of the Board would have been greater. It matters not whether a man is a Democrat or a Republican when it comes to appointment to one of the medical positions under control of the state. The thing to be considered first and always is the qualifications of the man.

BETWEEN now and next November a fierce political battle will be fought in Indiana. As physicians we are particularly interested in the character of the men we are to send to the state legislature and the governor's office and the principles they represent. The political duty of every physician in Indiana is to use his influence for men who not only pledge themselves to favor the measures advocated by the medical profession, but whose general reputation for integrity is a guarantee that the pledge will be fulfilled. A candidate who refuses to give an unconditional endorsement of any measure approved by the medical profession, having for its object the improvement of conditions pertaining to public health, sanitation, vital statistics, medical education, restrictions for the practice of medicine, prevention of sale of fraudulent nostrums, or anything else of a similar nature which is essentially for the benefit of the people, even though originating with the medical profession, should not receive the support or the vote of the intelligent and progressive physicians of Indiana. The active influence and vote of the medical profession of the state can defeat many unworthy candidates, and we owe it to our profession, to ourselves and to the public at large to vote for men not because they represent parties, but because of their character and because they represent principles for which we contend.

THE settlement of the medical college question for Indiana is a great step in advance for medical education, and much credit is due the presidents of Purdue and Indiana Universities and the faculties of the two contending well-established medical schools for the broadminded manner in which they put aside all selfish motives and agreed to many concessions and sacrifices for the purpose of securing an amicable, just and satisfactory settlement of the contention for one school and one school only for the state and that school to be supported by the state and having the endorsement of the medical profession of the state. By the terms of the agreement the one school is to be the medical department of the Indiana University, and we have every reason to believe that President Bryan will put forth every effort to make the school one of the leading medical institutions of the country. As an indication of his intentions to start right it may be said that he is at this writing piloting a committee of representative Indiana medical men around among noted eastern medical schools with a view to securing information which will be of value in determin-

ing the plans to be followed in establishing the new medical department for Indiana University. We believe that the idea which should take precedence over every other is not how large a medical school we can have but how good. Quality should be the first consideration, and no doubt President Bryan and his advisers have that in mind.

EVERY doctor in Indiana who accepts an appointment as medical examiner for a life insurance company that pays but \$3.00 for a complete examination should hold up his hands when the roll is called for members of the class of medical men who retard the progress of medical economics. If a doctor is conscientious in his work and makes a complete examination, including urinalysis, and accurately fills out the insurance blanks provided for use in all examinations, the service is worth \$5.00. If the examiner slights his work because of a small fee then he is dishonest and does both himself and the company an injustice. No matter what the fee, the physician owes it to himself as well as to the company he represents to do good work, and if he does good work he is entitled to a respectable fee. The only reason why respectable fees are not paid by all insurance companies is that some men can always be found who are willing to sell their services for less than they are worth, and are willing to make almost any sacrifices to secure official positions with life insurance companies. Fortunately the better class of medical men refuse to become the cheap employes of soulless life insurance companies, and the day will come when the company that selects its medical examiners on account of price and not on account of ability will have to go out of business or raise their rates to meet the unnecessary losses brought on by such false economy.

PROBABLY the poor misguided recreant who so recklessly swallowed the four hundred cactin pellets without so much as the wink of an eye or an alteration in the beat of the pulse was sure he was not getting "an absolutely pure preparation," or else he was of the fire-eating variety, who could, with equal impunity, have devoured as many phosphorus tipped match heads and still retained an intact mandible. And, lo, the much abused dog, the sudden protégé of the spasmodic anti-vivisectionist, was likewise chosen from a brand of well-known immunes, whose blood pressure could not have been altered even with a stick of dynamite. What a pity that

science should so besmirch her otherwise fair name as to make use of such freaks of Nature merely to refute the claims of a single commercial concern that was seeking only to sell its wares! And then, too, to resort to the use of the poor, defenseless dog, when all this firm asked was that this drug be combined with another and more powerful one, hyoscin (the only pure form of which could be obtained from them alone) and with some morphin, be injected into the human victim once, twice or thrice, depending on his resistance thereto.

We would be the last to attempt to stifle the legitimate manufacture and sale of new remedies provided they were able to stand the fire of experimental tests conscientiously and thoroughly conducted, but when a concern, whether of doctors or laymen, attempts to force on the profession a proposition that has no moral excuse for existence then our stand is on the opposite side of the fence.

THE Industrial Review Publishing Company, of Philadelphia, has a unique scheme for "sandbagging" the medical profession. In a letter to Indiana physicians this company, over the signature of F. M. Jenkins as business manager, extends an invitation to doctors to become members of a "Bureau of Physicians" with a view of possible selection as physicians for accident and health insurance companies. Accompanying the letter is a blank contract for signature requiring the payment of \$2.00 as a membership fee, upon payment of which the victim secures a year's subscription to *The Industrial Review* and is enrolled as a member of the "Bureau of Physicians." A semi-annual list of the Bureau's physicians is to be published as a supplement to *The Industrial Review*, and this list is to be furnished to every accident and health insurance company. The contract also provides a schedule of fees to be charged by members of the Bureau for services rendered the accident and health companies when any services are rendered. The fees are ridiculously low and the number of physicians to be taken into the Bureau from each city and town is not mentioned, but these features of the contract are supposed to be overlooked. Of course nothing is said about the fact that all accident and health companies are quite capable of selecting their physicians and without the recommendation of any publishing company which gives the recommendation for a price, and would probably resent any suggestions from such a source as to fees to be paid for services rendered by medical men. The scheme is nothing more than

an attempt to increase the circulation of *The Industrial Review* for the profit of the publishers, and if there is anything more to it the doctor who signs one of the contracts offered him will find that he has agreed to render ten dollars worth of service for one dollar in money. The doctors of Indiana should be too shrewd to be victimized by the acceptance of any such sandbagging proposition.

MEDICAL men have no one to blame but themselves for the passage of the optometry law by the last state assembly. Without one single word of protest the optometry bill went through both houses and was finally signed by the governor. The bill looked innocent enough, and without any knowledge of the dangers to the public which the passage of such a law makes possible, it was easy to secure for it favorable consideration at the hands of the legislators and governor. Now that the working of the law has shown up the brazen effrontery with which opticians pose as doctors and invite the public to consult them regarding all eye defects, and even in some instances assume to treat eye diseases, the medical profession is becoming aroused to the necessity of asking the next legislature to repeal or modify the law. The illogical feature of the law is the fact that the practice of optometry is defined as the measurement of the powers of vision and the adaptation of lenses for the aid thereof, all without the use of drugs. Thus the law gives authority to opticians to do the work, and at the same time prohibits the employment of the means necessary to do it. Furthermore, the law authorizes opticians to adapt lenses to eyes for defects of vision which may be due to diseases in other parts of the body, and to diseases which may be situated in the eyes themselves. The adaptation of lenses to eyes under such circumstances, while improving vision for the time, may be the cause of deferring proper treatment until blindness or even death may be the result. To determine when defects of vision are due to defects in the eyes, or to diseases, requires the ability to make a distinctive diagnosis, and this knowledge can only be acquired, according to the laws of the State of Indiana, by four years' study in a medical college. The harm that has resulted from the work of itinerant spectacle venders has been great, but the perils to which the people are exposed by the practice of the opticians who under the present optometry law designate themselves as "eyesight specialists," "ophthalmologists," "doctors of refraction," "drugless doctors," etc.,

and who even delude the ignorant by their advertised claims to cure diseases by the adjustment of glasses, is incalculable.

THERE are good and sufficient reasons why the Indiana State Medical Association should hold its annual sessions in the fall instead of the early summer as at present. One of the chief reasons for the change is that it is a serious mistake to have a state association session so near the date of the annual session of the A. M. A., as many physicians feel that they can not afford the sacrifice of time and expense required to attend the sessions of both associations within a period of two or three weeks, and in consequence the general attendance at neither of the sessions is what it would be if the dates of the sessions were farther apart. Many of the Indiana physicians have already declared their intention of attending the Chicago session of the A. M. A. this coming June, but frankly admit that they can not afford the additional time and expense required to attend the State Association session at French Lick two weeks later. Other physicians say they can attend only one of the big sessions, and prefer to miss the Chicago session and go to French Lick. It is quite evident, therefore, that more physicians would be able to attend both sessions if the dates were further apart. Then, again, some of the best men in every state find it impossible to prepare papers for two associations that hold meetings close together, and they are very apt to show a preference for the national association, this depriving the State Association of valuable contributions, and perhaps even the attendance of such men who find it impossible to devote time to two important meetings held so close together. Finally, there is no particular reason why we should continue to hold our sessions in May or June except to follow custom. There is no more favorable season of the year for holding a medical meeting than the fall, preferably the last week in September or the first week in October, and for the best interests of both the national and state associations as well as the physicians of the state we ought to make the change suggested. The House of Delegates of the A. M. A. has three times recommended all state associations to hold annual sessions in the fall, and those states that have followed the recommendation report that the change has proven beneficial from every standpoint. Indiana should fall in line and profit in a similar manner.

THE Fort Wayne holocaust, caused by the burning of the fire-trap Aveline Hotel at 4 o'clock in the morning, with a loss of twelve or fifteen lives and serious injuries to twice as many more, is a horror that should point a lesson. The city has been criminally negligent in adopting and enforcing suitable building laws, in requiring adequate fire escapes on all buildings where large numbers of people congregate, and in securing modern apparatus for fighting fire and the saving of human lives during the progress of a fire. Events show that the Aveline Hotel was nothing but a tinder box which required but a spark to turn the entire structure into a mass of flames within a few minutes time. The fire escapes were wholly inadequate and were cut off from the reach of many of the inmates on account of smoke, heat and flames which prevented the use of the halls and corridors. The imprisoned people were thus forced to look to windows for escape, but no ladders, nets or any other life-saving device was offered many of these unfortunates by the fire department, and in consequence the fire victims, driven by the flames, were forced to jump, some of them from a height of five and six stories, only to later be picked up dead or seriously injured. Some of those who attempted to reach the fire escapes by way of the halls were suffocated by smoke or lost their way, and were later a prey to the flames. Others never got out of their rooms, but died like rats in a trap.

What a pity that such a terrible lesson should be needed to impress upon any community a sense of its responsibility for the care and protection of human life. The Aveline horror could be duplicated in any hotel in the city of Fort Wayne and in several of the public school buildings, office buildings and factories, which are known to be fire-traps. No doubt some action will now be taken to prevent a repetition of the Aveline Hotel disaster, and it is hoped that every other city in the land will also take extra precautions, for Fort Wayne is no more negligent in this matter than hundreds of other cities and towns. It costs money to build modern fire-proof buildings and to equip them with safety devices for the protection of human life, and it increases taxation to maintain a fire department adequately equipped for not only fighting fire but saving lives during the progress of a fire, but the money is well spent and there should be a general awakening to the necessity for such enterprise. The memory of the crumbling and blackened walls of what was once the Aveline

Hotel, the charred corpses in the morgues, and the burned and injured people now in the hospitals of Fort Wayne should for many years stand as an evidence of what it costs to be criminally negligent.

CORRESPONDENCE

ANTI-SPITTING ORDINANCE.

MADISON, IND., May 5, 1908.

To the Editor:—I desire to report for THE JOURNAL the result of our anti-spitting ordinance and how nicely it works. We have nice cement walks and for quite a time after they were made the people seemed to act as if they were made on purpose to be spit upon. So after numerous complaints from the public, our city council passed a very efficient anti-spitting ordinance, with a fine of from \$1.00 to \$20.00 for its violation. Then the city board of health passed strong resolutions endorsing the ordinance and declaring spitting on the pavements insanitary and a menace to good health, and then had a number of large cards printed warning and notifying the public of the penalty, which they tacked up in all public places. The results are all that could be desired, and we have not had to prosecute a single case for its violation.

J. COOPERIDER, M.D.,
Secretary Board of Health.

NOSTRUM ADVERTISING.

ELKHART, IND., April 22, 1908.

To the Editor:—Your editorial in the April issue, "Patent Medicine and Quack Doctor Advertising," should be productive of much good. The suggestion to "let the editors feel that their pocketbooks are being touched" should be acted on. One physician alone can not do much to make them feel that way: it requires united action of the profession. I have had some experience fighting the evil single-handed.

In the *Commoner*, edited by William J. Bryan, appears from time to time an advertisement informing the reader that "Dr. Miles Anti-Pain Pills will prevent and cure pain of every nature" and that they are "perfectly harmless." About a year ago I wrote the publisher, calling his attention to the deceptive nature of the advertisement, and received a reply stating that the matter would receive consideration. I wrote again, mentioning the fact that acetanilid, of which drug the pill in question contains 2

grains, was classed by the Pure Food Act with morphin, cocain, chloral, etc., and referred the publisher to articles in the *Journal of the A. M. A.*, volume 44, page 1726, and volume 46, page 351, dealing with acetanilid poisoning. The answer received was similar to the first, only it contained the soul-cheering assurance that "it is not our intention to advertise anything in the medical line but what physicians of our own acquaintance and of our own cities would be willing to prescribe for their patients." I have since written several times to both the publisher and the editor, but they are evidently too busy fighting the "special interests" to pay any further attention to the matter. Finally I asked them to discontinue my subscription to the *Commoner*, which they did.

One man alone will be ignored, as I have been. If one hundred physicians over the State of Indiana alone would write letters to Mr. Bryan asking him to purge the *Commoner* of its patent-medicine advertisements he would "sit up and take notice."

Lest any one think I am moved by political animosity, let him know that I have twice voted for Mr. Bryan for President and have been a reader of the *Commoner* for several years.

Very truly yours,
E. M. HOOVER, M.D.

THE OPTOMETRY LAW.

HARTFORD CITY, IND., April 24, 1908.

To the Editor:—Shall we have progression, or temporary retrogression in the adjustment of glasses to the human eye? This subject offers considerable food for thought.

Having been a general practitioner in an Indiana town of 6,000 inhabitants for six years, I am in a position to see the inroads which the present optometry law has brought upon the general practice of medicine as well as the practice of ophthalmology. At the present time the state of Indiana has a large number of opticians who advertise both in the newspapers and by hand bills "to cure," by the adjustment of glasses, such diseases as appendicitis, epilepsy, nervous diseases of women and children, hemorrhoids, all the female disorders peculiar to women, stomach trouble and a number of other diseases. These are all cured, so the advertisements say, by the wonderful so-called "Drugless Science Practitioners," and I have a communication from a physician of Indianapolis who limits his practice to diseases of the eye, saying that he has recently received a letter from a reputable

oculist from near Vincennes, testifying that one of these opticians, licensed under the present optometry law, who styles himself an "ophthalmologist," agrees to cure diseases of the eyes by his "new method of applying glasses."

Now, Doctors, think what this means to the unfortunate patient who has an eye disease which will rapidly destroy vision unless checked by appropriate medical treatment administered under the advice of a competent physician. Many a patient who thinks he needs only glasses has a deep-seated lesion, the discovery of which requires more knowledge than the spectacle vendor can ever hope to have. Even the proper determination of errors of refraction requires the use of drugs in the majority of cases, and this must of necessity be delegated to the medical man.

So to take a broad-minded view of the subject, "Eyestrain and Who Should Treat It," I can not resist the feeling that for the public welfare I must positively take the stand that absolutely no one but a medical man should attempt to refract the human eye.

I sincerely hope we can secure a new law or so modify the present law that either the optician's present unwarranted assertions and claims can be prohibited, and prosecutions made possible when opticians step over the line of what optometry really means. It occurs to me that if the matter is discussed by both the general physician as well as the specialist, a plan can be adopted which will result in a betterment of conditions and certainly more protection for the public.

C. L. BELL.

EYE-STRAIN AND WHO SHOULD TREAT IT.

MUNCIE, IND., April 22, 1908.

To the Editor:—The articles written by Dr. Frank Morrison and Dr. F. C. Heath, which appeared in the March and April numbers of *THE JOURNAL* should arouse our profession to the importance of agitating the subject of "Eye-Strain and Who Should Treat It." The discussion of this subject should be carried on systematically by every county society till a sentiment has been created that will bring about the repeal of the objectionable optometry law, which was no doubt enacted without carefully investigating the evils that would come from its enactment.

Those who pay special attention to ophthalmology (more than the general practitioner who does no refraction work) are confronted with the wrong that is perpetrated on the public

The profession in general should receive more knowledge of the irregularities that are being practiced since the enactment of this law. "The Optometrical Specialist" apparently enjoys all the privileges and immunities that are enjoyed by the regularly educated physician who has passed through all kinds of deprivations and hardship in order to properly prepare himself for his work. The optician spends only as many weeks as the oculist spends years in study, and the oculist after years spent in preparation discovers that in the practice of his specialty he is in active competition with these incompetents, who are nothing more than spectacle vendors.

We all know that without a cycloplegic, refraction work is very unsatisfactory, and in fact those who use a cycloplegic every day know that we can not give satisfactory results without it in the majority of cases. The optician has not the license to practice medicine, therefore he can not and does not use this most indispensable adjunct to the practice of scientific refraction and his work is therefore very liable to be inaccurate if not injurious.

It is a common practice for the optician to dispense proprietary eye lotions and unguents. He tries to make good after he has been granted a license to decorate his store or office, which he points to with pride and which plainly says he is "doctor of optics." He assumes that if he is styled "doctor" he can prescribe for eye diseases.

It is an insult and an injustice heaped upon our grand profession to be constantly in competition with men who are incompetent to do this very important subject the service that it so justly deserves. The law as passed by our last legislature intended to prevent the peddling of spectacles. The "optical specialist" has a very clever scheme of having an office, as required by the optometry law, and then every day save one each week he goes from house to house or town to town representing himself as an "eyesight specialist."

Is this just and right for these men of four or six weeks' preparation to be allowed to endanger the vision of so many innocent people? The laws governing the practice of medicine and surgery are right and just as far as they go, but they should be so amended as to include the practice of optics and to designate that the fitting of glasses is as much the practice of medicine as the reducing of a fracture or the administration of antitoxin. The present laws are grossly inadequate for the protection of the public, so let every physician and ophthalmologist use his influence to enlighten the coming legislature on

the reasons for the repeal of the optometry law and the need of an amendment to the medical law so that it will make the fitting of glasses a part of the practice of medicine.

ARTHUR E. VINTON.

PROSECUTION OF AN ILLEGAL PRACTITIONER OF MEDICINE.

HUNTINGTON, IND., April 5, 1908.

To the Editor:—It may interest you to note, if you have not already learned through the papers, that I, as secretary of the Huntington County Medical Society, have filed charges with the prosecuting attorney against one W. E. Nichols, of Andrews, for practicing medicine without the proper medical diploma and without a state license as required by the laws of Indiana.

W. E. Nichols was elected to membership in the Huntington County Medical Society in 1904. Through the State Board of Medical Registration we were advised that this W. E. Nichols had no license to practice medicine in the State of Indiana. Investigation disclosed a doubt as to the genuineness of this man's medical diploma. Charges were brought against W. E. Nichols of having obtained membership in the county society by misrepresentation and fraud. He was notified of these charges, and after considerable effort and delay he appeared before the society and made a general denial but offering no evidence to disprove the charges. He claimed to have graduated from Rush Medical College in the University of Chicago in 1894. There is a W. E. Nichols who graduated from Rush in 1894 and his present location is at Terre Haute, Ind.

John M. Dodson, dean of Rush Medical College, in a communication writes that only one W. E. Nichols ever graduated from Rush Medical College in 1894 and that this Dr. Nichols is at the present time resident and practicing at Terre Haute, Ind. Correspondence with Dr. W. E. Nichols at Terre Haute, Ind., confirms the above. In a malpractice suit brought against W. E. Nichols, of Anders, in Huntington about two years ago, W. E. Nichols on the stand testified and swore that he was a graduate of Keokuk Medical College, Iowa. In a communication from Dr. La Force, secretary of Keokuk Medical College, Keokuk, Iowa, he writes that W. E. Nichols never attended there. W. E. Nichols, of Andrews, can not procure a diploma from either institution, but submitted a certificate issued to him by Rush Medical College, which certificate states that it has been issued to Dr. W. E. Nichols, graduate of Rush Medical College of 1904,

upon his affidavit that the original diploma was destroyed by fire and that this certificate is issued to him in lieu of such diploma. In other words, this W. E. Nichols, of Andrews, had represented himself as being the W. E. Nichols of Terre Haute and through fraud had obtained this certificate. Upon this certificate it seems that the Indiana State Board of Medical Registration issued him a temporary permit, expecting him to appear for examination for permanent license. It was upon this temporary permit that W. E. Nichols had been practicing medicine in the State of Indiana. Although notified by the state board a number of times he failed to present himself for examination until last October, with a negative result. Since then the state board has refused to permit him to come up for another examination owing to his uncertain credentials. However, the man has been practicing medicine openly right along. He was expelled from the Huntington County Medical Society at a meeting held October 8, 1907.

This case has been set for trial some time during the next term of the Circuit Court, and from present information I have been given to understand that the defense will be the fact of his possessing a temporary permit from the state board and that the state board can not go behind or antedate its permit. Yours very truly,

MAURICE H. KLEBS,

Secy. Huntington County Medical Society.

DEATHS

DR. FRANKLIN W. HAYS, for many years connected with the Indiana Medical College and at one time its secretary, died in Los Angeles, Cal., March 25, 1908.

DR. WILLIS B. WILSON, for more than fifty years a practitioner of Rolling Prairie, Ind., and a member of the Laporte County Pension Examining Board, died at his home, April 6, aged 79.

DR. FRANCIS M. DAILY died at his home in Millhousen, Ind., April 6, after an illness of several months, aged 64. He graduated from the College of Physicians and Surgeons, Keokuk, Iowa, in 1878.

DR. ROBERT Q. HAGGERTY, a graduate of the Indiana Medical College in 1874, and a member of the American Medical Association, died suddenly at his home in Elkhart, April 8, from heart disease, aged 54.

DR. EDWARD C. PRIGG died at his home, four miles southwest of Middletown, April 16, 1908, aged 82 years. Aside from a practicing physician, Dr. Prigg was a poet and song writer and acquired no little reputation in his day.

DR. JACOB K. ZINN, a graduate of the Physio-Medical College of Indianapolis, died at his residence in Covington, Ind., April 23, 1908, after an operation for appendicitis, aged 44 years. He was a member of the Fountain County Medical Society at the time of his death.

DR. JOSEPH WAREHAM JAY, a graduate of the Eclectic Medical Institute, Cincinnati, one of the most prominent dentists of Richmond, Ind., and at one time president of the State and Eastern Indiana Dental Associations, died at his home, Dec. 9, 1907, from debility following mastoid disease, after an illness of five and a half days, aged 70.

ARBACES CUSHMAN, M.D., for 38 years an active practitioner at Graysville, died at his home, April 8, after two months' illness from chronic malaria, aged 68 years. He graduated from Jefferson Medical College, Philadelphia, in 1869. He served throughout the Civil War in the Indiana Volunteer Cavalry. At the time of his death he was a member of the American Medical Association, the Indiana State Medical Association, and Sullivan County Medical Society.

(NOTICE PREPARED BY DR. ROBERT HESSLER,
LOGANSPORT.)

DR. JOSEPH G. ROGERS, of Logansport, Superintendent of the Northern Indiana Hospital for Insane since its foundation, died April 11, 1908, aged 67. He had been in ill health for about two years on account of a purulent renal affection, which terminated in acute peritonitis.

Dr. Rogers was born at Madison, Ind., Nov. 23, 1841. Confined to his bed from his twelfth to his eighteenth year by Pott's disease of the spine, he pursued during this period a collegiate course of study. Upon his recovery he read law for a year and then began the study of medicine. Entering Bellevue Hospital Medical College, he graduated thence M.D. in 1864, and in the same year entered upon practice in Madison, being until the close of the war an acting assistant surgeon, U. S. Volunteer Army, in the Madison general hospital. In 1865-66 he traveled in Europe, and on returning to America he resumed practice at Madison. In 1875-76 he was

professor of materia medica and therapeutics in the Indiana College of Physicians and Surgeons. He married June 20, 1872, Margaret, daughter of Dr. W. H. Watson, of Bedford, Pa. The bereaved widow and five grown-up children now mourn their loss.

From 1879 to 1883 Dr. Rogers was superintendent of the Indiana Hospital for Insane, at Indianapolis. He was Medical Engineer on the Board of Commissioners for Additional Hospitals for Insane from its organization in 1883 up to the completion of the new hospitals in 1888; at the same time he was Superintendent of Construction for the Northern Hospital (Longcliff), and on its completion was appointed Medical Superintendent, a position he held continuously up to the time of his death. His knowledge of the Northern Hospital was complete; it began with its very foundation and all through its growth in successive years; a constant discussion of affairs, in the daily "1 o'clock conferences" with the heads of departments, kept him in touch with every detail. He was a very systematic man and as far as possible supervised every detail.

He was an upright, conscientious and just man; everybody who ever came in close contact with him recognized this fact. He was never harsh or unreasoning; he set high standards and his own example led others to live up to them. He was a close observer, a student and great reader and had a remarkable memory. It is said of him that he knew more about the construction of buildings than many an architect; more about electricity and the wiring of a building than many an electrician; he knew more about gardening than many gardeners. (The writer recalls the interest Dr. Rogers took in the advent of a number of European weeds in a field of crimson clover, from seed which came from Europe, and the timely efforts made to prevent their spread.) Early each year the garden was replotted and allowances made for the different crops to be sown or planted. The garden had an irrigation system, and this was of constant interest to visitors. The institution was so economically managed that its annual per capita expenses were the lowest of any of the state insane hospitals.

"Longcliff" as it stands to-day is a monument to the man; to see it is to appreciate what he has done for the state.

Dr. Rogers was a frequent contributor to medical societies and literary clubs and published an occasional paper. His published papers of interest to physicians may be divided into three groups as follows: (a) relating to general medi-

cine and insanity; (b) hospital construction and management; (c) relating to the chemistry of water.

Shortly after returning from college he devised a method of preventing the incrustation in boilers which became commercially successful. When a young man fresh from college, an old steamboat captain who knew him well one day tapped him on the shoulder and told him that with all his knowledge of chemistry he ought to make a study of Ohio river water and try to devise some method by which incrustation of boilers might be prevented; it was a hint that was promptly taken up. In May, 1874, he read a paper before the American Railway Master Mechanics' Association on "Steam Boiler Incrustation. Its Causes, Consequences and Prevention." This paper is of special interest to engineers; it was published in the transactions of the above association for 1874. Tannate of soda is the reagent used: the process became important commercially. One of the last things the Doctor did was to install a "water purifier" at Longcliff, which obviates the use of the tannate process, which up to then had been used. Dr. Rogers was the first to make a quantitative chemical examination of the sulphated saline waters of Orange County; the determinations for gas were made at the springs. His paper appeared in the *Western Journal of Medicine* for December, 1869. He suggested the name "Pluto's Well," whose waters seem to play such an important rôle in Indiana politics.

While on the board for additional hospitals, he made a special study of hospital construction, and subsequently drew up nearly all the specifications for the new ones—the Northern, Eastern, and Southern—as shown by the reports of the commission at the time.

"The State and Its Insane" is the title of a paper presented before the Indiana Social Science Association, May, 1883; he traced the development of caring for the insane in Indiana and showed the need for additional hospitals—at that time there was only the hospital at Indianapolis. Fifteen years later he again raised his voice before the State Conference of Charities and Corrections on the same subject—for the new hospitals were full to overflowing and more room was needed. In 1900, as President of the American Medico-Psychological Association, his address was on "A Century of Hospital Building for the Insane:" as a student of what had been accomplished in the United States and in the world generally, and from his intimate knowledge of the Indiana hospitals, he spoke with authority.

The annual reports of the institution contain many valuable suggestions, as on the importance of pure water in preventing typhoid fever; the draining of wet places and prevention of the breeding of anopheles mosquito and thereby limiting the spread of malaria; of the importance of pure air in the wards and keeping down dust and thereby preventing air-borne affections.

Among early medical papers there are mentioned, in the Atkinson biography, "Carbolic Acid in Purulent Ophthalmia," "Treatment of Wounds on Eyeball," "Sayre's Splint in Hip Disease."

"Thyroids in Catalepsy" was read before the American Medico-Psychological Association in 1896, and appeared in its proceedings for the same year. It gives an account of thyroid medication carried on in the hospital in 1895-96; the results obtained by the use of desiccated thyroids were remarkable.

"First Aids for the Insane" was read before the Marion County Medical Society in 1898; the paper was intended for, and is of value to, the general practitioner; it was published in the *Indiana Medical Journal* for April, 1898.

"Cold as a Cure for Tetanus" appeared in the same journal for October, 1901; the treatment is based on the theory that cold prevents the growth or development of bacterial life by chilling the injured part, as by ice bags, for several days continuously until the symptoms subside. The Doctor was especially interested in this treatment and induced a number of physicians to try it, with uniformly good results when instituted in time.

"Vocation in Paretic Dementia"—a brief note before the Amer. Med.-Psycho. Assn., in 1899, called attention to the comparative frequency of the affection among railway employes, notably engineers; mental stress and physical jar may be the factors.

The writer's acquaintance with Dr. Rogers goes back to the summer of 1894, and for over three years he lived under the same roof. The Doctor was one of the best informed men I ever met; he was at all times a student and a close observer, a clear thinker. In the practice of medicine there are constantly occurring knotty problems where one is in doubt of what is best to do, and all the young men who have been under him (many now advanced in years) can testify what a help and inspiration Dr. Rogers has been to them.

To the long life of a man who has devoted himself to the welfare of his fellowmen justice can not be done in a brief note; a volume could scarcely do him justice.

PERSONALS

DR. E. B. MUMFORD has removed from New Harmony to Indianapolis.

MRS. E. R. SISSON, wife of Dr. Sisson, of Greenfield, is ill with pleurisy.

DR. NOBLE P. HOWARD, of Greenfield, is very seriously ill with heart trouble.

DR. WALKER SCHELL, of Terre Haute, has returned from a year's study in Vienna.

DR. M. M. ADAMS, of Greenfield, who fell and broke his right arm April 5, 1908, is slowly improving.

DR. E. D. THIXTUN, of Sullivan, has located in Terre Haute and occupies an office with Dr. Stunkard.

DR. RALPH BOLMAN, of Fort Wayne, was operated at St. Joseph Hospital on April 11 for mastoiditis.

DR. HENRY L. MUNCIE, of Hoosierville, was received as a member of Clay County Medical Society in April.

DR. HARRY ELLIOTT, of Poland, Ind., and Miss Maude Mendenhall, of Indianapolis, were married April 15.

DR. GEORGE L. SHOEMAKER, of Ligonier, has been spending several weeks in Chicago doing postgraduate work.

DR. J. CLIFFORD WALLACE and Miss Pearl Bond, both of Fort Wayne, were united in marriage on April 22, 1908.

DR. HARLEY TAYLOR, who in October moved to Thorntown, Ind., has returned to Rochester and resumed his practice.

DR. D. W. SHEEK, of Greenwood, was united in marriage, April 13, 1908, to Miss Anne Lewis Vivian, of Harrodsburg, Ky.

THE house and office of Dr. R. S. Wilson, Berne, Ind., including all his office fixtures, were destroyed by fire Monday, April 20.

DRS. J. C. GIFFORD and A. F. TULLEY have returned to their work in Brazil after a pleasant winter's sojourn in the Sunny South.

DR. O. G. MCFARLAND, of Hamilton, Ind., was operated on at the Lutheran Hospital, Fort Wayne, April 21, for an attack of mastoiditis.

DR. G. W. FINLEY will represent the Clay County Medical Society at the Chicago meeting of the American Medical Association in June.

DR. JOSEPH SHONKWILER, of Rockhill, has gone to New York City to take a course at the New York Postgraduate Medical School and Hospital.

DR. EDGAR F. KISER, superintendent of the Indianapolis City Dispensary, was united in marriage at Muncie April 14, 1908, to Miss Cleone Hene, of Muncie.

DR. AUGUSTUS LARUE MARSHALL, of Indianapolis, was united in marriage, April 21, to Miss Ethel Salm, daughter of Albert Salm, Auditor of Marion County.

DR. E. J. McOSCAR, Fort Wayne, sailed for Europe by the Mediterranean route on April 29. He goes for study in the clinics at Vienna and other medical centers.

DR. M. R. COMBS, of Terre Haute, is convalescing after an operation for empyema following a severe attack of pneumonia, and will soon be able to resume his practice.

DR. J. H. GROFF, of Cumberland, has recently purchased the home and office of Dr. W. R. King, formerly of Greenfield, but now surgeon at the Soldiers' Home, Lafayette.

DR. S. R. CUNNINGHAM, for several years surgeon at the State Soldier's Home, Lafayette, has resigned and will soon return to Indianapolis, where he will limit his practice to surgery.

DR. FRANK SOMMERS, of Indianapolis, has located in Greenfield, occupying the offices vacated by Dr. G. W. Lee, who is now with Dr. W. R. King as surgeon to the Soldiers' Home, Lafayette.

DR. T. C. KENNEDY, of Shelbyville, delivered an address before the Chicago Medical Society, on April 22, by special invitation, his subject being "The Medical Treatment of Gallstone Disease."

DR. S. A. SHOEMAKER, of Poneto, is spending the months of April and May in the various postgraduates schools and hospitals of Chicago. After the close of his clinical courses he will attend the Chicago session of the A. M. A., after which he will return home and resume his general practice in Poneto.

DR. R. O. McALEXANDER, of Indianapolis, together with his wife and two children, left on April 14 for Europe, where he will devote his time to the study of abdominal surgery and gynecology, most of the time being spent in Vienna and Berlin. They will visit points of interest in Italy first. They will return about the 1st of October.

NEWS, NOTES AND COMMENTS

D. APPLETON & COMPANY of New York announce their removal to their new offices at 29-35 West Thirty-second Street, New York City.

AT THE annual meeting of the Twelfth District Medical Society, held at Fort Wayne, April 21, 1908, there were 154 members and guests present.

DR. GEORGE B. McCLELLAN, alias Dr. Diamond Dick, in the local courts of Marion, April 8, was found guilty of practicing medicine without a license and was fined \$25.00 and costs.

ONE of the special features of the 1908 session of the American Medical Association is to be a series of alumni reunions of the different medical colleges in this country. Owing to the central location of Chicago and its unusual opportunities, a larger attendance than usual is anticipated.

THE commencement exercises of the combined medical schools of Indiana will be held in Bloomington Wednesday, May 20, at 10 a. m. Dr. W. N. Wishard will be the principal speaker upon this occasion. The diplomas will be presented by President W. L. Bryan. Following the exercises a dinner will be given.

THE Indianapolis Medical Society, which has been meeting in the Willoughby Building for about ten years, will change its quarters to the assembly room of the Commercial Building, May 1, 1908. This change is made necessary by the increase in membership and attendance, the present rooms being too small.

THE following physicians, headed by President W. L. Bryan of Indiana University, are now in the east on a tour of inspection of the medical colleges and hospitals with a view to the acquisition of knowledge which will help in the improvement of the course of instruction to be given by the new medical school born of the coalition of the three former medical colleges of Indiana: B. D. Myers, J. W. Ford, Miles F. Porter, John F. Barnhill, A. B. Graham, F. F. Hutchins and E. D. Clark. They will visit Baltimore, Philadelphia, New York, Boston, Ithica and New Haven (Yale). A preliminary announcement will be issued immediately after the return of this committee.

A CONFERENCE was held at the Claypool Hotel, Indianapolis, April 21, to consider the matter of enforcing the medical law. Dr. J. C. Webster of the State Board of Medical Registration and Examination presided. Talks were made by Drs. Spurgeon and Gott of the board, Attorney Gavin and Assistant Attorney General Cavins, Dr. F. C. Heath, secretary of the Indiana State Medical Association; Dr. J. H. Weinstein of Terre Haute, councilor for Fifth District; Dr. R. H. Ritter, secretary of Indianapolis Medical Society; Dr. M. T. Knowlton of Terre Haute, Dr. E. M. Haggard for the physio-medical organization, Dr. W. P. Best for the eclectic and others. The consensus of opinion was that the county societies should aid the board by means of a committee on prosecution from each society, the committees from different schools to co-operate where possible.

THE Association of American Teachers of the Diseases of Children will hold its annual meeting in Chicago at the Great Northern Hotel, corner of Jackson Boulevard and Dearborn Street,

on June 1. Requirements for membership in this association are somewhat unique. To be eligible one must be a regular physician resident in the United States, Canada or Mexico, who is in good professional standing and membership in his county or local medical society and actively engaged as professor or associate professor or clinical professor of pediatrics, or as adjunct to such a chair, or who holds the position of lecturer on this branch or an equivalent position in a recognized medical college, or who is a member of a properly organized hospital or dispensary staff actively engaged in the treatment of children. All such are invited to join the association, and all physicians and surgeons interested in children are invited to attend the meeting. Its objects are the study, the teaching and the practice of pediatrics.

SOCIETY PROCEEDINGS

PRELIMINARY PROGRAM FOR STATE ASSOCIATION MEETING AT FRENCH LICK, JUNE 18-19, 1908.

- Disposal of Sewage in Small towns. Geo. B. Lake, Wolcottville.
- Epidemiology of Typhoid Fever. H. O. Bruggeman, Fort Wayne.
- Concerning Anesthesia; Hyoscin, Morphine, Cactin Anesthesia. Thos. M. Jones, Anderson.
- Dermoid Cysts. H. G. Nierman, Fort Wayne.
- Six Hundred Cases of Labor in Private Practice. H. A. Cowing, Muncie.
- Anesthesia Considered as a Specialty. C. N. Combs, Terre Haute.
- A Consideration of General Anesthetics. W. R. Davidson, Evansville.
- Relation Between Heart and Kidney Affections. Robert Hessler, Logansport.
- Strangulated Hernia, Importance of Early Recognition and the Necessity of Its Radical Treatment. T. B. Eastman, Indianapolis.
- Scoliosis. David Ross, Indianapolis.
- The Technic of Harelip and Cleft Palate Operations. J. R. Eastman, Indianapolis.
- Obstruction of the Bowels. E. D. Clark, Indianapolis.
- Obstruction of the Bowels Due to Traumatism. J. H. Ford, Indianapolis.
- Raynaud's Disease. John Kolmer, Indianapolis.
- Relation of Physicians and Druggists. S. E. Earp, and J. R. Francis, Indianapolis.
- Some Considerations of Intra-Sigmoid Disease. G. W. Combs, Indianapolis.
- The Diagnosis and Treatment of Sinus Thrombosis. J. F. Barnhill, Indianapolis.
- A Few Important Points in Regard to Nervous and Mental Diseases. C. F. Neu, Indianapolis.
- Diabetes; Diagnosis, Treatment and Report of a Case. L. L. Mebley, Summitville.
- Etiology of Chorea and Rheumatism. W. D. Hoskins, Indianapolis.

- Some Ocular Manifestations in General Diseases. W. F. Hughes, Indianapolis.
- Tuberculin Therapy. W. T. S. Dodds, Indianapolis.
- Treatment of Diabetes. Geo. D. Kahla, French Lick.
- Symposium on Exophthalmic Goiter:
- (a) Etiology and Pathology. J. A. McDonald, Indianapolis.
 - (b) Symptoms and Medical Treatment. F. O. Dorsey, Indianapolis.
 - (c) Surgical Treatment. J. V. Reed, Indianapolis.
- The Modern View of the Etiology and Treatment of Aene Vulgaris and Aene Rosacea. A. M. Cole, Indianapolis.
- Myocardial Failure from Other Causes than Valve Lesions. A. C. Kimberlin, Indianapolis.
- Myocarditis from a Purely Pathologic Standpoint. R. H. Ritter, Indianapolis.
- Atypical Pneumonia. C. R. Sowder, Indianapolis.
- Symposium on Obstetrics:
- (a) Normal Labor. Jane Ketcham, Indianapolis.
 - (b) Toxemias of Pregnancy. Louis Burckhardt, Indianapolis.
 - (c) Puerperal Infection. G. B. Jackson, Indianapolis.
- A Plea for State Control of Inebriety and Drug Addictions. A. L. Wilson, Indianapolis.
- A Plea for the Use of Pharmacopeal and National Formulary Preparations. F. H. Carter, Indianapolis.
- The Early Clinical Diagnosis of Pulmonary Tuberculosis. T. Victor Keene, Indianapolis.
- Gonorrheal Ophthalmia. W. N. Sharp, Indianapolis.
- The Present Status of Syphilis. A. W. Brayton, Indianapolis.
- The Puerperal Perineum—Protection and Repair. M. I. Rosenthal, Fort Wayne.
- The Diagnosis and Treatment of Fluctuating Tumors of the Female Pelvis. George H. Grant, Richmond.
- Excuses in Surgical Cleanliness. M. A. Austin, Anderson.

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of March 31, 1908.)

Society met in regular session at the Assembly Room, with 26 members present. President and vice-president being absent, Dr. S. H. Havice was called on to preside. Minutes of previous meeting read and approved.

Sponges Left in the Abdomen.—Clinical case report by Dr. M. F. Porter. Patient, female, with personal and family history good. Had been married eight years. Had one child. Three years prior to her visit to Dr. Porter she had had hematuria, and for two years had had pain in the right side, which had been constant for two months. The bowels were regular. On examination tenderness was found at McBurney's point and in both ovarian regions. Diagnosis of chronic appendicitis with tubal involvement was made and operation performed, patient making an uneventful recovery. She was discharged from the hospital three weeks after her operation. A week or ten days following her discharge Dr. Porter received a message from her doctor saying that strips of gauze were coming away in rolls the size of a pencil. Dr. Porter then

went to see the case and in consultation with her doctor made an examination and found that there was some cloth protruding from the vagina. This was removed. The cloths were clean save that they were stained with urine. The vagina was perfectly healthy, there being no evidences of fistula. Dr. Porter told her physician that this material did not come through from the abdominal cavity, but was introduced into the vagina by the patient herself, and he suggested that they retire for a little, venturing the suggestion that on their return there would be more cloths coming away. On their return they found more rags, as Dr. Porter said. He exhibited these rags for inspection. They were mostly cotton goods and not surgical gauze. Dr. Porter said that he was inclined to question the advisability of allowing convalescent patients to assist in making sponges, as it might cause a surgeon quite a bit of annoyance to prove to the jury that this material really did not come from the abdomen and that the surgeon had not been negligent.

Abscess of the Brain was the title of a paper by Dr. H. O. Bruggeman.

Tumors of the Brain, Varieties, Pathology and Symptoms.—This subject was presented by Dr. W. W. Carey.

In opening the discussion Dr. Porter said that in considering the etiology of abscess of the brain we are apt to overlook the etiologic importance of common infections such as typhoid. He said he had seen cases of multiple abscess from chronic otitis media, and has seen acute meningitis, and a phlebitis of the lateral sinus and abscess in it. He has seen a case of multiple abscesses where there were sinuses leading to the outer world and these could be followed into the calvarium. They were just about to operate the case when the nurse reported that the patient had ceased breathing. Artificial respiration was instituted and the patient was kept alive by this means for sixteen hours. She died and a postmortem showed multiple abscess in the occipital lobe. He said we know little of the real cause of death in these sudden deaths in abscess of the brain. He reported a case of removal of a tumor between the corpus callosum and falx which proved to be a sarcoma after examination by Dr. Rhamy. Patient is still living and does farm work. These cases of tumor often go blind if unattended. However, they need not be allowed to go blind.

Dr. Weaver said that Cushing says respiratory failure is a common occurrence in cerebral abscess, and advises having apparatus handy for making artificial respiration when operating. He referred to a case in which the heart beat twenty-three hours after failure and leucocyte count in differentiating cerebral abscess from meningitis.

Dr. Bulson said he had seen two or three cases of frontal abscess with practically no symptoms, and has seen two cases of abscess in pre-frontal region without any symptoms until about one week before death, and on autopsy they were found to have been of long standing. He has also seen quite a number of epidural abscesses and a few cases of sinus abscesses and involvement of the brain substance in connection with his mastoid work.

Dr. Havice spoke on ocular manifestations of cerebral tumors and abscess. In a brain abscess you have the history of a septic condition. He said that very small growths may produce choked disc. Choked disc

is one of the very best evidences we have of intracranial growth.

Motion was made and carried to adjourn meeting of April 21, and carry the program over until the following date.

Dr. Van Buskirk made a motion, which was carried, that a committee be appointed to arrange for entertainment of visitors April 21. Chair appointed Drs. Kane, G. Van Sweringen and Van Buskirk.

Adjourned.

J. C. WALLACE, Sec.

(Meeting of April 7, 1908.)

Society met in regular session at the Assembly Room, Tuesday evening, April 7, with 18 members present. Meeting called to order by President Calvin.

Lupus in the Sacral Region.—Clinical case report by Dr. B. Van Sweringen. He exhibited pictures showing the condition, which started eighteen months prior to the date of taking the pictures. The case was treated by a thorough enurettement and then by actual cautery on the floor and edges. The patient is now being treated with tuberculin, with apparently good results, as the area is now about one-half the size it was two weeks ago.

Dr. Van Sweringen also reported a case of **Epithelioma of the Vulva with Secondary Involvement of the Inguinal Glands**. The vulva and inguinal glands were removed two weeks ago and the case is now progressing nicely.

Infection of the Eye with Influenza Bacillus.—Case report by Dr. A. E. Bulson, Jr. Man presented himself with a suppurative of the cornea, and anterior chamber of the eye was filled with pus. Dr. Bulson endeavored to evacuate the pus by incision in the cornea, but found that plastic iritis had set in and he was later compelled to remove the eyeball. A specimen of pus was given to Dr. Rhamy for examination and he reported nothing found save a few organisms that looked like pneumococci. Patient shortly after developed a purulent discharge from his good eye which was purulent in its nature. Following the removal of the eye the mucous membrane became covered with a thick purulent discharge. Ordinary antiseptics were employed but without response. Another examination was made by Dr. Rhamy and he reported that the infection was probably due to influenza bacillus. Two applications of pure tincture of iodine cured the case.

Adjourned.

J. C. WALLACE, Sec.

CLARK COUNTY.

At the April meeting of the Clark County Medical Society the following officers were elected for one year: President, James H. Walker, Henryville; vice-president, Claud C. Crum, Jeffersonville; secretary-treasurer, David Cohen, Jeffersonville; censors, Drs. J. N. Ruddell, Jeffersonville, Wayne Crum, Sellersburg, and Cad Jones, Charlestown; delegate to state association, Dr. W. Marshall Varble, Jeffersonville.

Adjourned.

DAVID COHEN, Sec.

DEARBORN COUNTY.

The regular meeting of the Dearborn County Medical Society was held March 31. The program consisted of a lecture by Dr. E. G. Zinke, Cincinnati, Ohio, on "The Significance of Some Abdominal Pains," and an ad-

dress by Dr. W. H. Stemm, of North Vernon, Councilor for the Fourth District, on "We Want, If Possible, to Inject More Life Into the Dearborn County Medical Society." Twenty members were present to enjoy the program and the banquet which followed. As a result of the meeting it was voted to have regular monthly meetings instead of having them only every other month as heretofore.

Adjourned.

O. S. JAQUITH, Sec.

DECATUR COUNTY.

Decatur County Medical Society met April 3, all the members being present but Drs. Bentle and Sanders. Dr. Bland led the work on "The Lungs: Gross and Microscopic Anatomy, Blood Supply, Functional and Nutritional; Nerves and Lymphatics," and Dr. R. M. Thomas conducted the discussion of the subject, "Physiology of Respiration." Dr. White read a paper on "Normal Physical Diagnosis."

Adjourned.

M. A. TREMAIN, Sec.

The society again met on April 10, with Dr. W. H. Stemm of North Vernon, Councilor of the Fourth District, present, who took part in the discussions and gave a talk on perfecting the county and state organization, and especially commending the methods of this society in conducting the postgraduate work. Drs. Wood, Kercheval and Bland conducted the discussion of the subject, "Bronchitis, Acute and Chronic, Congestion of the Lungs, and Hemoptysis."

Adjourned.

M. A. TREMAIN, Sec.

The society met April 17, and the subject, "Pneumonia, Lobar and Lobular," was studied with Drs. Bird and Tremain as leaders. It was voted to meet the following Tuesday at 7:30 p. m. to consider the treatment of pneumonia. Dr. Wood led in the discussion, going over the different methods of treatment, showing the advantages and disadvantages of each.

Adjourned.

M. A. TREMAIN, Sec.

At the regular meeting of the society, held April 24, "Pleurisy, Emphysema, Gangrene of the Lungs and Abscess of the Lungs" were discussed by Drs. Bentle, Sanders, Thomas and White.

Adjourned.

M. A. TREMAIN, Sec.

DELAWARE COUNTY.

The regular meeting of the Delaware County Medical Society was held April 3, at which time a committee of three was appointed to investigate the duty and right of the society to prosecute violators of the law in reference to the practice of medicine. An instructive paper was presented by Dr. E. B. Mann on "Puerperal Eclampsia," in which the cause and treatment were the principal points discussed. He said that renal insufficiency and toxemia were the chief causes, the accumulation of toxins in the blood acting either by direct action of the nervous system or by irritating action on the capillaries, thereby producing anemia of the brain and convulsions. He also said: "The onset of symptoms indicative of gestational toxemia indicate the use of a milk diet, laxatives, diuretics, hot baths, flannel next to the skin, plenty of water, and with high arterial tension, pilocarpin muriate, gr. 1/6 b. i. d. or t. i. d., as indicated. Give chloroform at onset of convulsions and deliver if conditions permit. If not, continue active eliminative

treatment." The use of morphin was strongly condemned.

In the general discussion which followed, the eliminative treatment was favored. Morphin was advocated by one, who stated that the eliminative treatment was too slow when convulsions were occurring.

The death of Dr. W. L. Snyder, of Urbana, Ohio, having occurred in Muncie April 2, suitable action was taken by the society and a committee appointed to forward resolutions and a floral offering to the family of the deceased.

Adjourned.

H. S. BOWLES, Sec.

ELKHART COUNTY.

The Elkhart County Medical Society met in regular session Thursday evening, April 2, with twenty-three members present. Minutes of previous meeting read and approved. The first paper of the evening was by Dr. Kirby, subject, "Post-Partum Fever," and showed careful preparation. It was well discussed. The second paper was by Dr. Lemon on "Carcinoma of the Breast." He gave the present progress in cancer cases, the results of the radical operation and the x-ray. The discussion was opened by Dr. Fleming, followed by Dr. Becknel and others.

Provision was made for the full attendance of the society at the funeral of Dr. Mumaw, who died April 1. Dr. Stauff was authorized to secure a proper floral piece in the name of the society.

Adjourned.

GEORGE W. SPOHN, Sec.

GIBSON COUNTY.

The regular meeting of the Gibson County Medical Society was held at Fort Branch April 24. The program was as follows:

"Anatomy of the Bronchial Tubes," Dr. H. H. Alexander, Princeton; "Chronic Bronchitis," Dr. G. C. Kendle, Princeton; "Adenoids," Dr. W. W. Blair, the discussion of this paper being led by Dr. F. H. Maxam, Princeton; and "Fracture of Superior and Inferior Maxillary," Dr. Chas. Miller, Princeton.

At the annual election of officers, held March 27, the following officers were elected to serve for one year: President, G. C. Kendle, Princeton; vice-president, Harry Gudgel, Hazleton; secretary-treasurer, A. L. Ziliak, Princeton; board of censors, Drs. W. T. Williamson, Fort Branch, Martin Montgomery, Owensville, and D. H. Swan, Francisco.

Adjourned.

A. L. ZILIAK, Sec.

GRANT COUNTY.

The regular meeting of the Grant County Medical Society was held April 28. The paper of the evening was presented by Dr. Powell on "Vomiting of Pregnancy." Among other things she said that reflex vomiting occurs from stimulation of afferent nerves of the urogenital tract by the stretching of the internal os and malpositions. Correct malpositions by use of tampons and keep this up, if necessary, until the uterus is out of the pelvis. While reflex vomiting is only present during the first fourteen weeks, the resourcefulness of a physician will be taxed many times. Every drug of a sedative character has been used, but potassium bromid does more good to more cases than

any other one drug, given either per os or rectum. Its action is sedative to reflex action. Diet is very important. We now know that toxic conditions are some of the causes. Vomiting is one accompaniment of uremia when not due to pregnancy, so vomiting in this condition must be helped by elimination. Bouchard deprecates the use of sweating, because it lessens the amount of urine, and advises copious cold drinks and cold bathing, but by whatever form, "elimination" is the word always before us. Metchnikoff demonstrates that when toxins are due to utero-hepatic origin, they are combated by ferments found in acid milks, as buttermilk, sour milk, etc. When patients can not take these the ferments may be taken by capsules. If the bromids are used in these conditions, use the sodium salts, as all salts of potassium are contraindicated in uremia. After all forms of treatment have failed, conserve the life of the patient by removing the cause of the abortion. Dr. V. V. Cameron said, "More than two physicians should be necessary to say when an abortion is to be performed." Dr. W. A. Fankboner reported many cases showing that the resourcefulness of a physician is needed. He also reported one case of hydatid mole where there was intense vomiting.

Adjourned.

O. W. McQuown, Sec.

GREENE COUNTY.

The Greene County Medical Society held its regular meeting at Switz City on April 16. Two very interesting papers were read on "Acute Mania," by Dr. J. W. Clifford and Dr. W. R. Cravens. The main points in differential diagnosis between acute mania and delirium were emphasized as follows: In acute mania consciousness is not entirely lost, and fever is almost always absent, while in delirium consciousness is abolished and fever is usually present. The papers were discussed by the members and highly complimented. The next meeting of the society will be replaced by the meeting of the Second District Medical Society at Bloomfield, May 14, 1908.

Adjourned.

F. A. VAN SANDE, Sec.

HANCOCK COUNTY.

The Hancock County Medical Society met April 2, at Greenfield. The paper of the evening was by Dr. E. R. Gibbs, on the subject, "The Bacteriology and Pathology of Gonorrhea." A general discussion followed, which added much interest to the meeting. The next meeting will be May 7.

Adjourned.

E. R. GIBBS, Sec.

MARION COUNTY.

THE INDIANAPOLIS MEDICAL SOCIETY.

(Meeting of March 17, 1908.)

The society was called to order in the clinical amphitheater of the City Hospital by the president, Dr. Wynn. The minutes of the last meeting were read and approved. The application of Dr. Charles F. Voyles was read the first time and ordered posted.

Peculiar Psychopathy.—Dr. A. E. Sterne presented the first case. This was a woman, aged 41. She came into the hospital several weeks ago in a confused condition, unable to give a connected history and unknown

to her relatives. For forty-eight hours after admission she was delirious, requiring restraint. This gradually subsided and she was able to give her history. Following an illicit coitus several months ago, she had a profuse menstruation with some irregularity later. She then developed a leucorrhea and became intensely worried with the belief that she was both pregnant and the victim of venereal disease. Without any history, the delirium was at first thought to be that of typhoid, especially as she had an irregular temperature. Later she told that she had been using large amounts of whisky secretly for years. Dr. Sterne now believes that the delirium was due to the sudden and complete withdrawal of the alcohol. Examination reveals an aortic regurgitation, and a large mass to the left side of the uterus which is probably a fibroid tumor and is to be held responsible for the menstrual irregularity. There is no venereal disease present. The patient is now becoming much better in every way. The condition is probably one of pure psychopathy.

Internal Hydrocephalus.—Case presented by Dr. Sterne. Woman who was brought into the hospital unconscious, and so far no history has been obtained from her. She was supposed to have been thrown from a street car. She has had a slight rise of temperature, but for the most part the temperature has been subnormal. There has been projectile vomiting. The pulse has been very irregular in its rate, running as low as 50 for several days. There is deviation of the eyes and the right eye shows very little movement. Pupil reflexes are normal. From the friends it has been learned that she has been subject to epileptiform attacks. The patient is greatly deformed; the head is large, measuring 26½ inches in its greatest circumference. The face is small and asymmetrical. There is an extreme degree of rotato-lateral curvature of the spinal column. Dr. Sterne believes that there has existed here for years an internal hydrocephalus with dilatation of all the ventricles, probably including even the fourth. The accident has simply exaggerated the old condition. The projectile vomiting and the slow pulse would indicate cerebral compression either from fluid or perhaps a brain tumor. Lumbar puncture would be of very little value here either for diagnosis or treatment.

Tubercular Tumor of the Cerebellum.—Case report by Dr. E. C. Reyer. A Hunyak, unable to speak English, who has been in the hospital for one month. From his friends it was learned that following some injury to the head received in a fracas, he complained of headache, malaise and vomiting for ten days before entering the hospital. Since entering the hospital he has been in a semi-stupor from which he could be easily aroused. He has had a very irregular temperature, seldom going above normal, usually subnormal. The pulse has ranged from 52 to 80, but has not shown harmony with the respiration. The tongue is coated, there is an expression of pain on the face, he groans frequently, and has projectile vomiting, especially if turned to the left side. He is now markedly emaciated. The heart and lungs are negative, the abdomen is distended with tenderness in the right lower quadrant. There is some rigidity of the neck, the pupils contract slowly to light, the left being slower and somewhat dilated. The patellar reflex is diminished, there is no Babinski, Kernig's sign is present, and there is some ataxia of the right hand. The urinalysis is negative, but the ophthalmo-tuberculin test is positive. The diagnosis is between an injury to the cerebellum and

a tumor probably tubercular. He believes the latter to be the true condition and the right lobe of the cerebellum to be the one affected.

Peripheral Multiple Neuritis.—Case report by Dr. E. C. Reyer. Male, aged 51, now in the tuberculosis hospital. He exhibits the typical signs of a peripheral multiple neuritis of two year's standing. The case is of interest as to its etiology. There is no alcoholic nor diphtheritic history, and in the absence of these usual causes or any other toxemia, it is possible that the cause of the condition is the toxemia of tuberculosis.

Probable Thrombotic Lesions in the Cerebellum.—Case report by Dr. E. C. Reyer. Man, aged 80, who had perfect health up to nine years ago, when he fell and injured his head. After that there was a tendency to fall to the right. Later he fell and was unconscious for some time. He regained consciousness, but dimness of vision and impaired hearing persisted. He came into the hospital with a paraplegia which developed in the course of four or five days. Now the patellar reflex is absent, there is some ataxia of the right leg, the gait is unsteady but not typically ataxic. Dr. Reyer believes that there are thrombotic lesions in the cerebellum due probably to vascular sclerosis.

The society adjourned. R. H. RITTER, Sec.

INDIANAPOLIS EYE, EAR, NOSE AND THROAT SOCIETY.

The fourth regular meeting of the society was held at the office of Dr. Thos. C. Hood on the evening of March 30, 1908. Dr. Wm. F. Clevenger demonstrated a case of adeno-fibroma of the naso-pharynx in which the result of surgical procedure had been entirely successful. Papers were read by Dr. Keiper of Lafayette on "The Calmette Reaction for the Diagnosis of Tuberculosis," and Dr. John R. Newcomb on "The Value of Ophthalmoscopic Examination in the Diagnosis of Intracranial Complications of Suppurative Disease of the Middle Ear."

The question of adopting a code of ethics and a fee bill was discussed by the society, which resulted in the adoption of a code of ethics similar to that of the American Medical Association. The question of a fee bill was discussed freely and left in the hands of a committee for further report and action.

The first annual meeting will be held at the University Club on the evening of May 26, 1908. Dr. Samuel A. Johnston will be the chairman for the evening and Dr. John J. Kyle vice chairman. Dr. Wm. L. Ballenger of Chicago will be the guest of honor.

Adjourned. H. C. PARKER, Sec.-Treas.

MIAMI COUNTY.

The March meeting of the Miami County Medical Society was held in the Commercial Club Room, Peru. Meeting was called to order by President Griswold, with nine members present. Minutes of previous meeting were read and approved. The paper of the evening was by Dr. John Spooner, on the subject "Technic of Brain Surgery." A general discussion followed. The application of Dr. Spooner was received and he was elected to membership in the society.

Adjourned. D. C. RIDENOUR, Sec.

The Miami County Medical Society met in regular session April 24, with eleven members present. Society called to order by President Griswold. Minutes of

previous meeting were read and approved. Dr. F. L. Resler of Amboy read a very interesting paper on "Therapeutic Action of the Salicylates," which was freely discussed. Dr. Andrews presented a patient suffering from a peculiar affection, with marked purpuric skin manifestation over the body, principally over the pelvic and lower extremities, which disease he thought to be purpura rheumatica. In the discussion which followed the diagnosis was confirmed, because of the severe joint pains that accompanied the eruption and the early clearing of the rheumatic symptoms under rheumatic medication. Dr. P. B. Carter of the Wabash Railways Employees' Hospital at Peru, presented a patient for diagnosis suffering from a peculiar nervous affection. An interesting discussion followed. It seemed to be a central lesion, though masked for positive diagnosis.

Adjourned.

D. C. RIDENOUR, Sec.

MONROE COUNTY.

The Monroe County Medical Society met Thursday evening, April 30, at the home of Dr. Fred Batman, Bloomington. Drs. Fletcher Gardner and Henry Alburger presented papers on "The Diagnosis and Operative Treatment of Hypernephroma." Election of officers.

Adjourned.

C. A. COLEMAN, Sec.

PIKE COUNTY.

The Pike County Medical Society at its regular annual meeting elected the following officers for the ensuing year: President, T. R. Rice; vice-president, S. R. Clark; secretary-treasurer, E. S. Imel; board of censors, Drs. Hunter, Kime and Basinger; delegate to state association meeting, Dr. C. Abbott, and alternate, Dr. J. W. Coleman. Dr. Basinger reported a case and read a paper on a very interesting case of podalic version done under morphin, hyosein and caetin anesthesia, with good results.

Adjourned.

E. S. IMEL, Sec.

POSEY COUNTY.

The Posey County Medical Society met in regular session at Cynthiana, Indiana, May 5, 1908. The papers of the evening were as follows: "Things of Interest to the Physician," Dr. U. C. Whiting, New Harmony; "Traumatic Iritis," Dr. C. J. Hall, Caborns; "Treatment of Acute Diseases of Children," Dr. J. E. Doerr, Mt. Vernon; and "Chemical and Therapeutic Incompatibility," Dr. N. W. Murphy, Stewartsville.

Adjourned.

F. H. STALLINGS, Treas.

PUTNAM COUNTY.

The Putnam County Medical Society met April 2 with Dr. Clint T. Baring, of Greencastle, and in accordance with the outline of the A. M. A., Dr. Walter McGaughey presented the subject, "Anatomy of the Trachea and Bronchi," and Dr. Charles Sudranski followed with the nerve and blood supply, also demonstrating the physiology of respiration. Dr. Jerome M. King, by the use of self-constructed charts, gave the society a treat as to normal and physical diagnosis of chest diseases.

The subject of "Acute and Chronic Bronchitis," was warmly discussed by Drs. J. V. Bastin, King and Gillespie.

Dr. Walter Hutcheson presented a very valuable paper upon "Lung Congestions and Hemoptysis," and the discussions which followed were cut short for want of time.

The society met April 16 at the office of Dr. J. M. King. Captain Eugene Hawkins presented the first number on the program, discussing at length the causes of pneumonia and giving a tabulated account of the pathological conditions caused by the different micrococci. The subject was also discussed by many of the members. Dr. C. T. Zaring presented a very interesting paper on the "Pathology of Pneumonia." Dr. W. W. Tucker differentiated erupous from catarrhal pneumonia, and Dr. Joseph Gillespie read a paper upon "Abscesses and Gangrene of the Lungs." Dr. Joseph L. Preston was physically unable to be present to discuss the subject of "Pleurisy." This is only the second time when the members of the society have been unable to take part when their names were on the program, since the adoption of the postgraduate course—a good record.

Adjourned.

J. V. BASTIN, Sec.

RIPLEY COUNTY.

At the April meeting of the Ripley County Medical Society Dr. Bine Whitlach reported a case of "Typical Myxedema," which was followed by a general discussion. Dr. John N. Hess was chosen delegate to attend the annual meeting of the State Medical Association at French Lick. Drs. Holten, Beckett and Hess will read papers and report cases at the May meeting. The meeting was thoroughly enjoyed.

Adjourned.

M. J. COOMES, Sec.

SPENCER COUNTY.

The Spencer County Medical Society met in special session April 21, 1908, with Dr. C. S. Baker of Chrisney, Ind. The first paper of the evening was "Early Experiences of a Physician," by Dr. G. F. Adye, who related a case of labor with hour-glass contraction of the uterus. He also reported a case of using a pair of scissors as craniotomy instruments to effect delivery. He gave an instance of a case of rupture of the uterus and delivery of child through rupture and vagina in place of performing a Cesarean section; all of which was very interesting. The second paper was on "Treatment of Pneumonia," by Dr. C. S. Baker. Pneumonia being a self-limited disease he advised supporting the vital forces until crisis. Dr. H. G. Weiss of Rockport was elected to represent the society at the meeting of the Indiana State Medical Association to be held at French Lick, Indiana, June 18 and 19.

The next meeting of the society will be held at Chrisney, May 19, 1908.

Adjourned.

H. Q. WHITE, Sec.

UNION COUNTY.

The Union County Medical Society met in regular session at Liberty April 1. Dr. M. F. Vereker read a paper on "Obstetrics." Dr. E. R. Beard read a paper on "Cystitis in the Female." Both papers were freely

discussed by all members present. The next meeting of the society will be held June 3, 1908.

Adjourned.

E. P. WEIST, Sec.

VIGO COUNTY.

The Vigo County Medical Society met in regular session in the Commercial Club rooms at Terre Haute, April 7. The lectures of the evening were by Dr. Fink on "The Anatomy of the Blood," and by Dr. Donnelly on "The Physiology of the Blood." A letter was read inviting the Vigo County Medical Society Library to join the Medical Library Association. Action deferred. Drs. Knowlton and Gillum were sent to represent the society at the meeting of the State Board of Medical Registration.

Adjourned.

CHARLES N. COMBS, Sec.

The regular meeting of the Society was held at the usual place April 14. The papers of the evening were by Dr. Jett on "Secondary Anemia," J. H. Weinstein on "Chlorosis," and E. L. Mattox on "Pernicious Anemia." Dr. Bernheimer showed a case of aneurysm of the innominate artery, involving the right subclavian and carotid for a short distance. The patient was a young student given to athletics. Dr. Knowlton made a blood count of Dr. Mattox to demonstrate the technique of enumerating the red and white cells.

Adjourned.

CHARLES N. COMBS, Sec.

The society met in regular session at the usual place, April 28. Dr. C. N. Combs gave a lecture on "Addison's Disease," showing lantern slides of the suprarenal capsule of man and of a cat, and of tuberculosis of the adrenals, and also a fresh dissection of the suprarenal gland in the sheep. He also gave a short talk on blood examination, showing the simplicity of making a differential count and urging its more frequent use. Dr. Bloomer also lectured on "Hodgkin's Disease."

In the discussion Dr. Knowlton spoke of grafting the gland from the lower animals in the cure of Addison's disease. Dr. Sehell said the diagnosis of Hodgkin's disease is not yet worked out. The tendency now is to eliminate Hodgkin's disease as a disease per se since it covers a number of other conditions. He mentioned Sternberg's hypothesis but most investigators reject this "sarcoma of the blood" theory as absurd. During the past year he had seen as many as a dozen sudden deaths while taking x-ray treatment for this disease, and he cautioned the greatest care in applying the Roentgen stream. Dr. Gillum described a postmortem made on a young man whose case could not be diagnosed. The symptoms of Addison's disease were entirely absent, yet he found both adrenals enormously enlarged, associated with a tumor of the liver. The microscope revealed tuberculosis of both localities. He also said that the differential blood count saves many cases of typhoid fever from being called pneumonia and enables us to diagnose perforation of the bowel in time, as we are rarely able to do by the ordinary signs. Dr. Jett related the findings in a postmortem which he made in an atypical case of Addison's disease. A large retroperitoneal sarcoma enclosed the entire kidney and suprarenal gland and prevented them from properly performing their functions. Dr. C. N. Combs presented three children in the same family with the classical symptoms of hereditary syphilis, including successive crops of blebs on palms and soles, macular eruption,

interstitial keratitis, notched teeth, onychia, enlarged spleen and enlarged epitrochlear and post-cervical glands.

Adjourned.

CHARLES N. COMBS, Sec.

WABASH COUNTY.

The Wabash County Medical Society met April 15 at North Manchester, for the first time in its history. This was done in honor of Dr. M. O. Lower, for more than thirty years a member, but who, owing to confinement due to illness, had been unable to attend society meetings for several years. An elaborate dinner was served at the Young Hotel, Dr. F. S. Kitson of North Manchester being the host. After dinner the society repaired to the residence of Dr. Lower where the formal program was followed. The paper presented for discussion was "Treatment of Puerperal Fever," by Dr. F. S. Kitson, which was discussed at length by most members present. The following applications for membership were received: Drs. Geo. D. Balsbaugh, North Manchester; John B. Shipley, Laketon; Geo. L. Shoemaker, North Manchester; and Anna Wilson, Wabash. The regular date of meeting was changed from the third to the fourth Wednesday of each month.

Adjourned.

L. E. JEWETT, Sec.

ELEVENTH COUNCILOR DISTRICT.

The first meeting of the Eleventh Councilor District Medical Society was held at the Barnett Hotel, Logansport, April 29, 1908. The first number of the afternoon program was the president's address, by Dr. Chas. H. McCully, of Logansport. "The County Medical Organization: How to Make it Interesting and Profitable," was the title of a paper by Dr. C. M. Kennedy of Camden. The discussion of this paper was opened by Dr. R. F. Frost, Huntington. Dr. Grant Goodwin, Monticello, read a paper on "Diseases of the Rectum," which was discussed by Dr. Glenn Henley, Fairmount. "A Plea for Early Diagnosis of Pyothorax and for Early Operation, with Report of Case of Resection of Chest," was made by Dr. E. H. Griswold, Peru, and the discussion was opened by Dr. Chas. L. Wright, Huntington. Dr. James Wilson of Wabash read a paper on "Etiology and Treatment of the Stomach Troubles We See Every Day," which was discussed by Dr. W. A. Fankboner of Marion. The meeting was followed by a banquet, which was highly enjoyed by every one present.

Adjourned.

MAURICE H. KREBS, Sec.

TWELFTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The second annual meeting of this society was held at Fort Wayne, April 21, 1908. Meeting was called to order by President S. H. Havice. The election of officers was the first order of business and resulted as follows: President, A. P. Buchman, Fort Wayne; first vice-president, J. L. Gilbert, Kendallville; second vice-president, H. F. Costello, Decatur; secretary, E. M. Van Buskirk, Fort Wayne; treasurer, D. C. Wybourn, Sheldon.

Pseudo-hypertrophic Paralysis.—Case report and exhibition of patient by Dr. G. W. McCaskey.

Patient, a boy of 15 years of age. The first thing noticed was a weakness of one ankle when the boy began to walk, followed by clumsiness of the lower

extremities and a tendency to fall which has gradually grown worse. The excessive development of the calf muscles had always been noticeable and was the occasion of frequent remarks while wearing short trousers. This in itself should create a suspicion of the disease, especially when associated with awkwardness. At the present time he walks with considerable difficulty, falls on the slightest provocation, and stands with his feet widely separated. There is marked talipes equinus owing to the shortening of the gastrocnemius through the retraction of the connective tissue which, together with adipose tissue, constitutes the bulk of the muscles effective. When he stands there is marked lordosis, which disappears when lying down. The ease belongs to the group of progressive muscular dystrophy and is dependent upon the embryonic defect. It is for the most part typical of an interesting and unusual feature, is a distinct tendency of Raynaud disease. This has been noticed for about two years. At times one or two fingers on each hand become perfectly white and pain him severely, the attack soon passing away if warmth is applied. This is of course due to a morbid condition of the vaso motor centers and adds a distinct neural to the muscular elements of the case. It suggests a possibility of complicating disease of the nerve center which is fully sustained by the electrical reaction of degeneration which is distinctly manifested in one leg, contrary to the general rule.

Dr. McCaskey also presented a case of hemiplegia, the result of cerebral hemorrhage occurring during the progress of typhoid fever. The attack came with characteristic suddenness seven years ago, four or five days after the onset of the fever, while the temperature was 104° F. The lesion was probably located in the lenticular region. The case is of particular interest, as the cause of the occurrence of cerebral hemorrhage was an unusual case of typhoid fever. A number of such cases are on record. Hemiplegia may occur during the progress of an acute attack, or thrombosis resulting from the localized focus of infection in artery, or from hemorrhage usually the result of endarteritis. The mode of onset in this case shows that it was undoubtedly hemorrhage.

Medical Inspection of Schools was the title of a paper presented by Dr. J. N. Hurty, secretary of the Indiana State Board of Health. He said that there was a growing public sentiment in favor of the medical inspection of schools, and that the medical profession should no longer be silent on such a matter, but bluntly tell the people the facts with reference to preventable diseases. Fully 80 per cent. of the 1,339 school children of Indiana who died during 1907 died from preventable diseases; 60 per cent. of school children are more or less physically disabled and need medical and surgical attention. Dr. Hurty said that in the examination of some of the public schools of Indiana he had found a deplorable condition of affairs. Many school buildings are inadequately lighted, poorly ventilated, and but little attention given to sanitary arrangements. In most instances this is due to a sense of false economy on the part of school boards. This is a state of affairs that is the result of the selection of incompetent and impractical men as members of school boards. Everywhere in the state we hear it confessed that it is impossible to tear down the old and insanitary fire-traps of school houses and build those that are safe and

sanitary, because there is not enough money. This is certainly a confession of incompetency to properly manage our schools, and it is time that the people be awakened to the dangers of such a condition. The management of our schools should be changed. Above everything else, our school boards should be taken from politics, and it would be a good idea if the school teachers themselves could be on our school boards, or, better still, if our school boards were largely made up of women.

The discussion of this paper was opened by Dr. Bruggeman of Fort Wayne, who said that the state was to be congratulated upon having such an earnest advocate of improved sanitary and public health conditions in our schools as Dr. Hurty has always been. He offered the following resolution:

WHEREAS, Not less than 50 per cent. of all school children at the present time are more or less physically defective or sick and in need of surgical or medical attention; and,

WHEREAS, Not less than 70 per cent. of the school houses in Indiana are wrongly lighted, badly ventilated, unevenly warmed, and in other ways insanitary, and hence reduces the efficiency of the pupils and causes sickness; therefore, be it

Resolved, By the Twelfth Councilor District Medical Society, in session at Fort Wayne, Indiana, April 21, 1908, that it is the sense of such society that it would be an act of public economy and humanity to remove the conditions which so greatly retard the progress of the school children, and which bring so much suffering and not a little death. And to this end it is recommended to the people that they demand a law which will command under heavy penalty the construction of sanitary and fire safe school houses, and which will command that all primary school children shall be medically inspected before they are admitted to the schools, and shall have such medical and sanitary inspection thereafter as may seem wise.

This resolution was unanimously adopted by the society, and the secretary directed to give copies of it to the public press.

Dr. McCaskey of Fort Wayne, in discussing Dr. Hurty's paper, said that he was in favor of the medical inspection of schools, and this should include infirmities, eyestrain, etc., but should take into consideration the sanitary conditions of buildings. The results of medical inspection of schools will be shown in the next generation and fully justify the efforts and funds used in that direction.

Dr. Lake of Wolcottville said that some provision should be made for the proper treatment of children requiring attention when parents are unable to pay fees to medical men for the services. He believes that there are physicians in every town who will be willing to donate their services for the good of the cause.

Dr. Shoemaker of Butler said that it was the duty of physicians to protect the public as much as possible and that they should urge upon the people the question of medical inspection of schools and demand a law requiring such inspection.

Dr. Drayer of Fort Wayne said that it is a shame that intelligent families who realize the importance of this subject find it necessary to call upon the State Board of Health for facts regarding children's health. The people should be educated by the medical profession to demand such reasonable laws from legislative bodies as are required to protect the health and lives of

school children. Our schools are at present overcrowded and our children are being for the most part kept in an insanitary, and therefore unhealthful, atmosphere several hours each day. We are laying the foundation for future deterioration of the race.

Dr. Hurty, in closing, said that the duty of the doctor is to agitate. Medical men see the conditions, but the parents do not. The people should deal with this question of the killing of children as it deals with other murder questions. A change in conditions can only come through a change in the manner of electing our school boards and in the kind of men chosen to serve.

Erythematous Eruption was the title of a paper by Dr. A. W. Brayton of Indianapolis, who thoroughly discussed the physiology and nerve supply of the skin and demonstrated the causes of many erythematous eruptions. He showed that many eruptions are due to a disturbance of the nervous system. The paper was discussed by Drs. Drayer, Shoemaker and Fowler.

Sinus Thrombosis was the title of a paper by Dr. John F. Barnhill of Indianapolis, who gave a demonstration of the anatomy of the sinuses of the skull and devoted special attention to a description of the sigmoid sinus and its collateral venous tributaries. Thrombus of the lateral sinus is a very serious condition and is not as infrequent as generally supposed. Early diagnosis is of the utmost importance. As a rule the disease occurs as the result of extension of an infectious process from the middle ear or mastoid. If a patient giving a history of an acute infectious disease, followed by suppurative otitis media or mastoiditis is found running a septic temperature ranging from normal to 103 and 104, and then back to normal or even subnormal, and then up again, we are safe in suspecting a sinus thrombosis. Sudden remissions in temperature in connection with an acute infective process of the middle ear or mastoid, particularly when these remissions are preceded or followed by chills or chilly sensations, should be considered almost as pathognomonic of inflammation of the lateral sinus. Every suspected case should have a competent nurse and the temperature should be taken frequently. Physicians should not depend upon their daily observations of temperature in such cases. There may or may not be any tenderness behind the ear, for an entire mastoid may be involved without tenderness, and, on the other hand, a sinus thrombosis may exist without a mastoid inflammation. All treatment is essentially surgical, and consists in laying bare the sinus, and if thrombus is detected the sinus should be widely opened, the thrombus removed, and the sinus dressed in the usual way. Puncture of the sinus with aspirating needles to determine whether a thrombus is present or not is of but little diagnostic value, and is apt to introduce infection directly into the sinus when it previously did not exist.

Dr. Wheelock of Fort Wayne opened the discussion by saying that sinus thrombosis comes on more insidiously than is generally supposed. Many of the patients giving a history of discharging ears and suddenly developing meningeal symptoms lose their lives as result of an unrecognized sinus thrombosis and extension of the infection to the brain substance. The steeple chart temperature is the safest diagnostic point, and should be considered significant even if there are no signs of mastoid involvement. In opening the mas-

toid operators are warranted in at least uncovering the sinus and critically examining it in suspicious cases, and in all cases where the bone overlying the sinus is unhealthy.

Dr. Bulson of Fort Wayne said that the important point to the general practitioner is the prevention of the disease, and one of the best ways to avoid sinus thrombosis is to take care of the middle ear diseases which every physician is frequently called upon to treat. It is the neglected infectious processes in the middle ear crying for drainage which result, through extension of the infectious process, in mastoid troubles and perhaps later sinus thrombosis. It should be remembered that infection will travel in the direction of least resistance, and every earache, particularly in connection with any of the exanthematous diseases, has in it the potential possibilities of great harm. If these earaches do not promptly subside under the local application of heat and other simple measures, free drainage should be established by making an incision in the drum membrane. This measure will prevent, in a very large percentage of cases, the development of mastoid complications and sinus involvement. Dr. Bulson said that he had never seen a mastoid involvement or a sinus thrombosis which he did not believe was due to neglect in properly caring for the original disease which was a suppurative otitis media. Mastoid cases, both before and after operation, require careful observation. The temperature should be taken frequently or otherwise sudden remissions may be overlooked. Whenever, during a mastoid operation, the bone over the sinus appears even to the slightest extent abnormal, it should be removed and the sinus thoroughly exposed. If the sinus does not look healthy the surgeon is warranted in opening it after first ligating or exsecting the jugular below. It should be remembered that a sinus thrombosis can come from a periphlebitis, and for this reason the technic of our mastoid operations should be as nearly perfect as possible.

Dr. Havice of Fort Wayne reported an interesting case of sinus thrombosis. The patient had two operations, but death resulted from extension of the infectious process to the brain.

Dr. Porter of Fort Wayne said that he had been present several times when cases of sinus thrombosis had been operated. In one of the cases he had tied the jugular before the aural surgeon opened the lateral sinus. He did not believe that there was any good reason for either tying or exsecting the jugular. It perhaps shut out some extension of infection from above, but infection can extend by the collateral veins, and therefore the advantages derived by the ligation or exsection of the jugular are offset by the possibility of extension of the trouble through other channels. Furthermore, the infection travels upward from the sinus. He thought if the sinus was thrombosed it should be opened and drained, but that it was bad policy to stir up the infection by curetting, and nothing was to be gained by ligation of the jugular. In other words ordinary surgical principles should be followed in the operation of a sinus thrombosis.

Dr. Barnhill, in concluding the discussion, said that it was impossible to shut off all the emissary veins, but that the most likely avenue for the extension of in-

fection was closed when we ligate or exsect the jugular. It should be our aim to shut off extension of infection as much as possible. It is as yet a disputed point as to whether the jugular should be ligated or exsected. The opening of the sinus should always be done with the field of operation as clean as it is possible to make it. The sinus should not be opened unless it is thoroughly exposed, and hemorrhage can be readily controlled by packing.

The Relation of Bovine to Human Tuberculosis was the title of a paper by Dr. A. W. Bitting of the United States Department of Agriculture. Dr. Bitting gave an interesting talk on this subject in which he described the method of locating certain tuberculous areas in animals, and the methods of slaughter houses in removing these diseased portions from meat which the department permits to be sold. Hogs contract tuberculosis by drinking milk from tuberculous cows. They can also contract the disease by drinking milk which has been inoculated with the human tubercle bacillus. Human and bovine tuberculosis are unquestionably the same, and this being the case it is the duty of the government and state officials to protect the people by forbidding the sale of milk from tuberculous cows and forbidding the sale of meat that is known to be tuberculous.

Dr. J. H. Gilpin of Fort Wayne reported an experiment where hogs were fed on anthrax-inoculated food and the hogs all developed general anthrax infection, showing that the infection can travel from the intestines throughout the body. There is ample evidence to prove that tubercle bacilli are taken into the system in the same way, by ingestion.

Dr. Weaver of Fort Wayne said that it is a settled fact that human and bovine tuberculosis are caused by the same infection, and he reported experiments which have conclusively proven this fact. Primary intestinal tuberculosis is not so rare in children as generally supposed, and it is due to ingestion of tubercle bacilli. Bovine tuberculosis is pathologic for humans by direct inoculation. Monkeys injected with tubercle bacilli from both sources have developed the same results.

Dr. Bruggeman gave a history of the fight against bovine tuberculosis in the city of Fort Wayne. One dairy sent seventeen cows to the slaughter house and nine of these were condemned. He said that tuberculosis is transmitted by fecal matter, and as all milk has manure in it the danger of infection from this source is great. No matter where the entry of infection may be the cattle develop pulmonary tuberculosis. It is even so with human beings. If the infection enters through the intestinal tract they are quite sure to develop pulmonary tuberculosis.

Dr. Bitting, in closing, said that it is a hopeful sign when so many states have taken decided action on the question of inspecting dairies and slaughter houses for the discovery of bovine tuberculosis. This means that eventually the development of human tuberculosis from bovine tuberculosis will be essentially an impossibility.

A Plea for the Earth Closet was the title of a paper by Dr. George B. Lake of Wolcottville. Dr. Lake illustrated his paper by several drawings and showed that the earth closet is a very sanitary way of disposing of fecal matter in rural districts.

Dr. Hurty, in discussing the paper, said that this question of the disposal of fecal matter is of vital importance to the people if sickness and death from typhoid fever are to be prevented. He said if we could only impress upon the people the one fact that typhoid fever means that the patient has been drinking or eating fecal matter, we perhaps would be able to secure more attention to this question of sanitary closets. Doctors can do much to prevent typhoid fever in the country districts if they will teach the people to properly dispose of their own filth so that it does not contaminate the water supply by drainage into wells, or does not contaminate the food through the medium of flies. Properly constructed and properly operated the earth closet is entirely satisfactory.

The evening session was held in the parlors of the Fort Wayne Club.

Perineal Rupture was the title of the first paper by Dr. M. I. Rosenthal, in which the physician was urged to use extreme care in the second stage of labor with a view to preventing perineal tears. These tears will occur even when the utmost care is exercised, but the laceration need not necessarily be so extensive. In cases of lacerated perineum Dr. Rosenthal recommends subcutaneous sutures deep in the muscles of the perineum, using for suture some non-absorbable material such as silver wire.

Dr. Hamilton of Fort Wayne, in discussing the paper, said that in the prevention of perineal tears the obstetrician should not be hindered in his work. The patient should be placed on a hard table and a skilled anesthetist should render assistance by placing the patient under complete anesthesia. Delivery can then be accomplished without the expulsive efforts which so frequently lacerate and the surgeon is unhampered in his efforts to preserve the perineum.

Dr. English of Fort Wayne said that ruptured perinei are more frequent than generally supposed. Therefore the perineum should be carefully inspected immediately after every delivery. Repair of the perineum should also occur immediately following the delivery of the placenta.

Dr. Porter of Fort Wayne said that in the repair of a lacerated perineum the essential thing to be considered is to secure perfect apposition of the lips of the wound and a non-absorbent stitch beneath the skin should be used for closing the opening.

Dr. B. Van Sweringen of Fort Wayne said that extensive laceration of the perineum can oftentimes be prevented by support of the perineum during the passage of the head. The head should not be forced. In repair of the perineum it is essential that there should be perfect apposition of the parts.

In concluding the discussion Dr. Rosenthal said that we should always go to an obstetrical case properly prepared for surgical work, and we should always be prepared to repair a ruptured perineum.

Certain Traumatisms Resulting from Labor was the title of a paper by Dr. J. Clarence Webster. In repair of the perineum we should not neglect the pelvic fascia. The levator ani muscle is a rudimentary muscle in man, attached to the white line of the pelvis. In the lower animals having tails this muscle plays an important part in the movement of the tail. It is attached higher in the pelvis. As we find animals assuming more of an erect posture we find this muscle

becoming smaller and attached lower down. This is true of the higher apes. In man we find it most marked. This muscle, as it meets the fellow on the opposite side in man, is very weak, only finding few digitations of muscle at places. The fascia is the stronger support of the pelvic viscera and should never be neglected in repair of the perineum.

The pelvic floor and parietes of the abdomen support the abdominal and pelvic viscera. In frozen sections ligaments (including those supporting the liver) are found folded on themselves. The mesentery and various ligaments' purposes seem to be to carry blood vessels and nerves to the organs. It has been computed that they may support about one-eighth of the weight of the organ attached to them.

In weak or distended abdomen we find their ligaments very much elongated and being drawn out by the weight of the organ not supported. During pregnancy the abdomen is greatly distended and at times much injured. We find three kinds of weak abdomens: (1) Weak recti muscles without their separation; (2) When the recti are separated; (3) When the recti are torn themselves. The umbilical region is the weakest part of the abdomen. By separation of the recti we find a spindle-shaped area at this place. Child-bearing is an antecedent history in a great majority of the cases. Many times the recti tend to come together without surgical help, as has been demonstrated in a few cases. Surgical aid and abdominal supports applied rightly are the only things to be advocated. Considering the cost of buying many abdominal supporters and their annoyance, surgical treatment is the one to be advised.

In discussion Dr. Porter, Fort Wayne, said that a person with either a "pot gut" belly or the one with a large belly with a depression in the center is very sure to have a hernia if he does any physical labor and lives long enough. The belly is weakened by distension of food, and eating much food requiring enormous quantity for nourishment. He then referred to feeding horses and cattle in such a manner that they become "pot gutted," and this was gone away with on giving more concentrated food. A certain per cent. of children's bellies are distended by food fermentation.

Dr. H. A. Duemling, Fort Wayne, condemned the use of a tight-fitting bandage to support the abdomen.

Dr. H. D. Wood of Angola called attention to injuries to the vaginal wall during labor.

Dr. G. W. McCaskey of Fort Wayne thought that it would take a great many frozen sections to arrive at the conclusions that the parietal walls and pelvic fascia were main supports to their viscera.

Drs. B. Van Sweringen, Rosenthal and Drayer commended Dr. Webster's paper.

Dr. Mary Whery asked regarding bandaging the belly after labor.

In conclusion Dr. Webster said that we have for many years paid great attention to lacerations of the cervix and perineum, but that it was the invisible traumatisms that we had neglected.

A smoker was given by the Allen County Medical Society to those present.

One hundred and fifty-four members and guests were registered at the meeting.

Adjourned.

E. M. VANBUSKIRK, Sec.

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ORIGINAL ARTICLES

THE PRACTICAL APPLICATION OF OPSONIC THERAPY.

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AND

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While the whole subject of vaccine therapy is still largely in the experimental stage, enough good has already been accomplished with it to make one feel that it will lead to great practical results, especially in chronic infections of all kinds. It can not be claimed that bacterial vaccines alone effect a cure, for in many cases they must be combined with other forms of treatment, such as medical, surgical and hygienic measures. Their chief value lies in hastening the period of treatment in many chronic infections, and also in making operative treatment less radical in other instances.

PRINCIPLES OF OPSONIC TREATMENT.

The whole trend of modern therapeutics revolves largely about the fact that in many diseased conditions there is a tendency on the part of the body itself to effect a cure. Many of the cells and tissues possess reserve powers that are only called into action when our bodies are injured or threatened with harmful agents, the most common of which are micro-organisms and chemical poisons. As these reactions on the part of the body are becoming better understood many processes heretofore considered pathological are now being considered as physiological. The splendid results following the use of Bier's hyperemia treatment of infections go far to show that inflammation is a conservative reaction, a true physiological process, and in most cases should

be encouraged instead of combated. The immunity possessed by individuals who have recovered from acute infectious diseases is in reality a body-state where the cells and fluids have become more powerful in their ability to destroy the germs of that disease. In other words, the body having recovered from one fight with the micro-organisms, increases its standing army of antibodies in numbers to efficiency. This immunity following the recovery from infectious diseases differs from the immunity produced by bacterial vaccine in degree only. In the former the tissues acquire their training in real warfare, while in the latter the fight takes on the nature of a skirmish.

Opsonins are substances existing in the blood of all persons, but vary in amount according to conditions. It has been found that bacterial vaccines give the best results in chronic infections where the opsonic contents of the blood are relatively low. In these chronic infections there is present almost invariably a connective tissue or scar tissue capsule surrounding focus of bacteria. The normal opsonins of the blood are reduced in an attempt to combat the infection, and the increased bacteria are unable to come in contact with the blood stream sufficiently to stimulate the formation of new opsonins, hence the persistently low opsonic index. Our aim, therefore, is to attempt to raise this index by injecting a vaccine made from bacteria taken from the patient's own lesions. In order to do this we inject the dead bacteria into a region of the body where they can come in contact with the general blood stream, and thus incite a formation of new opsonins. The bacterial vaccine, or suspension of dead organisms, do not act upon the living bacteria causing the infection directly, as in the case of administering antitoxin, but simply serve to stimulate the formation of opsonins and perhaps other

antibodies, which in their turn act upon the bacteria causing the infection.

The value of the vaccine treatment is increased by improving the patient's general condition as much as possible by avoiding antiseptics, both internal and local, by the use of the hyperemia treatment.

Anemia, malnutrition and fatigue tend to lower the opsonic index for all bacteria. Even in normal individuals the index is lowered by fatigue. This is often more marked in patients with chronic infections, especially tuberculosis. It is necessary, therefore, to put the patient in the best general condition possible, by the proper diet, tonics, etc., and also by avoiding the occurrence of fatigue.

The use of antiseptics in wounds is becoming more and more restricted. It is a well-known fact that an antiseptic will destroy the body cells quicker and much more easily than bacteria. If all the bacteria in a wound are not destroyed by the antiseptic they will later have a most abundant field of dead tissue cells in which to grow. The serum exuded into the wound contains opsonins and other bactericidal substances, which are immediately destroyed on coming in contact with antiseptics. Thus by applying antiseptic dressings to wounds we replace the natural bactericidal substances by an artificial one that is probably less efficient. Substances like creosote, lactic acid, chloroform and other antiseptics that are sometimes given internally, tend to reduce the opsonins of the blood and to reduce its fighting powers. It seems rational to suppose, therefore, that creosote taken internally in tuberculosis might do more harm than good.

The Bier method of hyperemia furnishes one of the most important aids to vaccine therapy of localized infections. By this procedure, either by the use of cups or by the aid of a constricting bandage about the part, we produce a local venous stasis and also an extravasation of lymph and leucocytes into the tissue. The blood taken from a hyperemic area shows a decidedly higher opsonic index than that taken from other regions. Thus the Bier treatment consists simply in concentrating opsonins in the locality where they are most needed.

THE PRACTICAL ADMINISTRATION OF BACTERIAL VACCINE.

Chronic infections due to the staphylococcus albus, aureus and citreus, the colon bacillus, pneumococcus and tubercular bacillus offer the best results with vaccine treatment. Gonorrheal infection of joints and of the posterior urethra respond favorably to the vaccine treatment in many

cases, but the improvement is not so constant as in the above-mentioned infections. Pulmonary tuberculosis, pneumonia and acute streptococcus infections have improved in many cases following the use of vaccines, but in these cases it is a question as to whether or not the vaccines really play an important part in the cure. In these acute conditions, where there is no connective tissue capsule about the focus of bacteria, it would seem that opsonic formation would be stimulated by the organisms causing disease, and that on giving a vaccine containing bacteria we would simply be adding fuel to the flames.

ACNE.

Acne responds most favorably to vaccine treatment. The majority of cases, both mild and severe, are cured; the skin becomes soft and the thick, greasy look disappears. If much scarring and pitting has taken place this will not be affected by the treatment. Most of the acne cases that are not cured are greatly improved. There are a few cases, however, that seem to be entirely unaffected, for which we find no explanation. The whole subject is too new to predict the duration of the cure. Our first case has remained well for one year without recurrence.

The first step in the treatment of acne is to obtain a culture of the offending organs. Slant agar cultures are made from two or three pimples, selecting those that are just beginning to soften, as the growths from these are more luxuriant than when taken from a well-formed pustule. The pimples should be washed several times with alcohol and allowed to dry; and the serum, or pus, squeezed out, is transferred to the culture tubes. After twenty-four hours of incubation the culture will have grown so that the type of organism can be determined, and this same growth can be often used in making the vaccine (see below). The opsonic index in acne is invariably low, ranging from .4 to .6. In our early cases we followed the index persistently throughout the course of the treatment, taking it every three or four days. We found that a positive phase, or increased opsonic index, lasted in almost all cases from sixteen to twenty-two days. This time corresponds closely with that obtained by other workers, which led us to abandon the index in acne cases, and also in other staphylococcus infections, except when unusual features presented themselves, that we were unable to understand. We administer the vaccine at intervals of two or three weeks, depending upon the clinical features of the case without the index as a guide, and our results seem to warrant this omission. The vaccine is given hypodermically

in the left arm, under the strictest aseptic precautions, and the dose of vaccine employed varies from 200,000,000 to 400,000,000 cocci. The patient must be warned that the acne may appear slightly worse two or three days following the injection, due to the negative phase, or lowered immunity, which invariably occurs immediately after giving the injection. From one to two weeks following the injection, improvement will often be noted, not so much in the existing pustules, but fewer new ones will form. If the improvement has been slight, or has not occurred, a second dose of vaccine should be given in two weeks; if the improvement has been marked, three weeks should elapse before a second dose is given.

A few of our cases have been cured by one or two injections, while others have required as many as five or six. While the vaccine treatment is being carried out special attention should be paid to the general condition of the patient, and lotions containing antiseptics should be prohibited.

BOILS AND FURUNCLES.

When these cases present themselves the evacuation of the pus is of most immediate importance, the vaccine treatment being secondary. We have followed Bier's methods of dealing with these infections with the most satisfactory results. The apex of the swellings is cleaned with lysol and alcohol and is punctured with a bistoury, making an incision not larger than an eighth of an inch. A slant agar culture is immediately made from the pus. A glass cup is then placed over the boil, of such a size that the rim will be well outside of the line of induration. Gentle suction is then made by means of an aspirator attached to the stem of the cup, and the pus is slowly drawn out. This is a much more comfortable procedure than squeezing out the contents of the boil; in fact, it diminishes the pain in the majority of cases, and at the same time it produces an acute hyperemia in the surrounding tissue. If the central slough is too large to be removed through the original opening, this may have to be enlarged, through which the neurotic tissue can be removed with a fine pair of forceps. The cavity should not be curetted or irrigated with antiseptic solution. The cup should remain on about ten minutes, when an extensive hyperemia and edema will have been produced. No packing is used, and the whole is covered with a sterile gauze. The cupping should be repeated in the same way after twenty-four hours, and the skin wound, which will have become plastered together, will open with gentle

suction. This procedure, carried out daily for four or five days, will cure the most severe boil, with a minimum amount of scarring and discomfort to the patient.

If there is no tendency for other boils to appear, it will be useless to give vaccine; but if other red or indurated spots are seen, an injection should be given, made from original culture, in the same dose as for acne. In all of our cases of furunculosis one injection was all that was required to effect a cure. In many cases, before suppuration has occurred, dry cupping over the indurated area will cause it to resolve without pus formation.

ACUTE INFECTIONS FOLLOWING TRAUMATIC WOUNDS.

Acute infections following traumatic wounds seldom require vaccine treatment, unless they become chronic; but in this class of cases we derive considerable benefit by concentrating the normal opsonins of the blood about the focus of the infection by means of the hyperemia treatment. If the infection is definitely localized the treatment will be similar to that used in the case of boils. When the infection attacks a limb, causing a diffuse edema or cellulitis, with or without pus formation, the constricting bandage is indicated. This consists of an elastic bandage, either an Esmarch bandage or the rubber of a wide suspender, which serves equally well, placed about the limb several inches above the upper limit of the inflammatory area. The success of this procedure depends very largely upon the tension given to the bandage in putting it on. This should be just tight enough to restrict the venous return to such a degree as to produce an edema of the part below, but should not be so tight as to interfere with the arterial supply to the limb. If pain, numbness or paresthesia is complained of the bandage is too tight. A properly fitting bandage causes the limb to swell and to appear cyanotic, and in the majority of cases there is a decrease of pain in the part. In these acute infections the bandage should be allowed to remain in place from twenty to twenty-two hours out of twenty-four; or better, five out of every six hours. The advantage of this treatment is that the patient suffers less pain; there are fewer constitutional symptoms from the absorption of toxins; the infection subsides earlier; and if surgical procedures have to be resorted to, more good can be accomplished with a less radical operation. In this class of cases, as in boils, antiseptics should be avoided; and if a moist dressing is indicated, sterile salt solution is all that is required.

If this infection becomes chronic or leads to persistent ulcers or sinuses the healing will be greatly hastened by the use of bacterial vaccines. One dose of the autogenous vaccine is all that is required.

CHRONIC SINUSES LEADING TO OLD ABSCESS CAVITIES.

In case of chronic sinuses leading to an infected gall bladder, kidney or to appendix abscess, when there is a sluggish granulation tissue formation, the process can be greatly accelerated by the use of vaccines. In these sinuses the colon bacillus is the most common organism found, and it is from this that the vaccine should be made. Wright explains the persistency of these sinuses in the following way: The opsonins of the blood can not reach the bacteria on the walls of the sinuses on account of the dried, coagulated fibrin, which forms over the granulation tissue, and which also furnishes a medium for the growth of the bacteria. Before fresh serum containing opsonins can reach these bacteria the fibrin films must be destroyed. It is a well-known fact that curetting these sinuses will often hasten their closure, but Wright has devised a more refined method. He fills the sinuses with an aqueous solution of .5 per cent. citrate of soda and 5 per cent. of sodium chlorid. A few hours later a clear serum will be seen to flow from the previously choked, dry sinus, because the citrate of soda will prevent coagulation of the lymph by decalcifying it; and the salt solution, being of a much higher osmotic tension than that of the body fluids, will cause the flow toward the sinus cavity. When this simple procedure does not bring about a closure of the sinus an autogenous vaccine should be given.

GONORRHEAL INFECTION.

Gonorrheal arthritis and tenosynovitis respond in the majority of cases to gonococcus vaccine, especially when combined with a restricting bandage applied above the part for five out of six hours. Several workers have claimed good results from the vaccine treatment in chronic gonorrheal infections of the genitourinary apparatus.

We have had no experience with this class of cases so far, but in making cultures from cases of chronic posterior urethritis we have obtained in the majority of them a pure culture of staphylococcus albus, and have seen a marked benefit following the administration of the autogenous vaccine.

STREPTOCOCCUS INFECTION.

Infections with the streptococcus pyogenes are generally acute, but in some cases they resemble the chronic infections by being separated from the general blood stream, not by a scar-tissue capsule, but by a coagulation of lymph in all the capillaries and lymphatics surrounding the focus of bacteria. This gives rise to the hard, diffuse swellings so often seen in streptococcus infections known as brawny indurations. In these conditions streptococcus vaccine often appears to do considerable good, especially when combined with treatment that will prevent the coagulation of lymph in its surrounding vessels, and thus allow the opsonins of the blood to reach the collection of bacteria. As a rule the coagulability of the blood in this class of infection is greatly increased. Wright reduces this tendency to coagulation by giving citric acid by mouth, in doses of from 15 to 60 grains every three or four hours, depending upon the severity of the case. Often on cutting into a brawny swelling the wound will be almost dry, but shortly after giving the citric acid, serum will be seen to well up in the wound, thus showing that a capillary circulation has been established. Wright claims excellent results with the streptococcus vaccine in these cases when combined with simple incision and the administration of citric acid.

INFECTIONS OF THE MUCOUS MEMBRANES AND THEIR GLANDS.

We have had a limited experience along this line, but according to Wright this is a favorable field for vaccine therapy. He says: "I have obtained or had successful results in many different infections of the mucous lining of the ear, antrum, nose, nasal sinuses, dental alveoli, salivary glands, also in bacillus coli, infections of the intestinal mucous membrane and gall bladder, and in many different infections of the uterus, urinary bladder and ureter.

TUBERCULAR INFECTION.

Surgical tuberculosis forms a class of cases that respond most favorably to vaccine therapy. Not only our own work but that of others point to the fact that tuberculin properly administered is the first indication in treating chronic tuberculosis. In many cases operation may be necessary, but by the use of the vaccine a much less radical procedure may be sufficient; and in those cases where operation has been performed and a healing has failed to take place, the vaccine will often bring about a closure of the wound. Our work along this line comprises cases of tuberculosis of bones, joints, lymphatic glands, skin,

mucous membranes, urinary bladder, kidney and epididymis. A few of our patients feel that they are perfectly well, but it is impossible for us, however, to claim a definite cure. In all cases there has been improvement in local conditions, a gain in weight and strength, a reduction of the fever, an improved appetite, and in the ability to digest food. Good hygienic conditions, together with the avoidance of fatigue, is an essential part of the treatment.

In tuberculosis of the bones and joints of the extremities the compression bandage should be used to supplement the vaccine treatment, but should be left on a shorter time than in acute infections. An application of the bandage for two hours, night and morning, is sufficient. When caseation or necrosis of bone has occurred its removal is indicated. When the tubercular process is far advanced, and the indications for operation are unmistakable, we refuse to give the vaccine, for little good can be accomplished in these cases by vaccine alone; and, moreover, the patient may cherish the hope of escaping operation altogether if tuberculin is given, and thus waste valuable time.

As mentioned above, we do not feel that it is necessary to take the opsonic index in pyogenic infections unless unusual features present themselves. In tubercular infection it is an entirely different matter. Each patient seems to respond differently, and the immunity derived from the injection of vaccine varies in degree and duration. We feel that it is absolutely essential to take the tubercular opsonic index in all patients before the first vaccination, and after that at intervals of four or five days for at least three or four weeks, until we have learned the degree and duration of his individual response.

The tubercular vaccine, like other forms, is a suspension of the dead bacilli, in normal salt solution, and is generally called the "New Tuberculin" (T. R.). We employ doses varying from 1/1000 to 1/500 mg., starting with the smaller and gradually working up to the larger dose. Injections are given at intervals of from one to three weeks, depending upon the way the patient responds. With us the larger doses have frequently produced local and general reaction, and the patient has had a decided setback. Some advise that tuberculin should not be given during a febrile period. This is probably true with pulmonary tuberculosis, but we have found that small doses will often reduce the fever in surgical tuberculosis.

In many tubercular infections, especially of the mucous membrane and in sinus and ulcers, we

have a secondary infection with one or more of the pyogenic bacteria. In these cases it will be necessary to give with the tuberculin a vaccine made from these secondary invaders.

In regard to the value of tuberculin in pulmonary tuberculosis, nothing of positive value can be said. Our own experience is so small, and the experience of others so contradictory, that it is impossible to come to a definite conclusion.

STOCK AND AUTOGENOUS VACCINE.

The question of a stock vaccine, compared with that of an autogenous one, is very important from a practical standpoint. If the stock vaccine will give the same results as one made from the patient's own infecting germ, the whole subject of vaccine therapy will be placed upon a much more practical basis than it is at present. With the staphylococcus albus and aureus stock vaccines we have in many cases obtained as good results as when the autogenous were used. In other cases we have obtained absolutely no results with the stock vaccine, while a cure or improvement resulted on using its autogenous vaccine. In using the stock vaccine a culture from its lesion must always be made in order to determine its exact kind of organism producing its lesion. An albus vaccine will do absolutely no good in an aureus infection, and vice versa. Stock vaccines of the colon bacilli have failed entirely, while we have obtained good results with autogenous vaccines. The difficulty of obtaining cultures from gonorrheal and tubercular infections forces us to use stock vaccines in these cases, but we would probably obtain better and more constant results if the production of autogenous vaccines with these bacteria were practical. We feel that use of stock vaccines is justified in many cases, provided the offending organism has been previously determined by cultural and microscopic methods. A stock vaccine containing staphylococcus albus, aureus and citreus, together, is put up for the treatment of abscess and pyogenic infections, and as this vaccine contains all three of the pus-producing organisms a culture might seem unnecessary. This "shotgun" dose should be strictly avoided, as it is decidedly unscientific and will do more harm than good. Another stock vaccine is on the market at the present time, labeled simply "Staphylococcus Vaccine," or "Staphylo-bacterin," without any reference being made as to germ. This should be universally condemned and absolutely avoided the same as a patent medicine put up without the formula upon the label.

The doses of the various vaccines are as follows:

Staphylococcus albus, aureus, and citreus	200,000,000-500,000,000
Colon bacillus	50,000,000-100,000,000
Streptococcus	20,000,000- 50,000,000
Pneumococcus	20,000,000- 50,000,000
Gonococcus	5,000,000- 20,000,000
Tubercular (T. R.)	1/1000 to 1/500 mg.

OPSONIC INDEX.

We hear from many sources a statement that the opsonic index is inaccurate and void of any practical value. It would seem, however, that those who have done serious work along this line, and who have developed a reliable technic by making great numbers of indices, lay great stress upon the value of the opsonic index in vaccine therapy. Many errors may creep in and the personal equation is considerable, but when the index is carefully made the error should be less than 10 per cent. It not only serves as an indication for the time to give the vaccine, but may also aid in determining the form of an infection when it is impossible to obtain a culture. A constantly low index to an organism, while that for all other organisms remains normal, points to the fact that this is the offending bacteria, whether it is tubercular bacilli or other bacteria. A tubercular opsonic index that fluctuates every three or four days from a low to a high points strongly to a pulmonary or acute form of tuberculosis. As mentioned above, the determination of the opsonic index for most bacterial infections is generally unnecessary except for tuberculosis; in this it should be frequently taken, especially during the first few weeks of the treatment.

TECHNIC OF ESTIMATING THE OPSONIC INDEX.

The object of determining the opsonic index is to compare the opsonic strength of the patient's serum to a certain bacteria with the serum of a normal or healthy person. In order to do this three things are necessary: (1) The patient's serum, and also the serum of one or more healthy persons; (2) an emulsion of the bacteria causing the infection; (3) an emulsion of serum-free or wasted leucocytes.

The serum is obtained by first collecting ten or twelve drops of blood from the lobe of the ear in the glass capsule (Fig. 1). The blood is allowed to run into the curved end of the capsule by capillary attraction. The lower end of the tube is sealed and the blood shaken to the lower end and allowed to clot. The blood from one or more healthy persons is taken at the same time, to furnish serum for comparison. The individual variation is diminished by using several normal

serums as a control, and this mixture is called a "pool." These capsules containing blood should be kept in the dark, as light tends to destroy the opsonins. The index should be made if possible on the same day that the blood is taken, because the strength gradually decreases with age. However, if all serums are taken at the same time the degree in strength will decrease proportionately in all of them. Accurate results can be obtained within twenty-four hours after taking the blood. These capsules containing the clotted blood are put into a centrifuge for a few minutes, and the clear serum will separate above the clot.

The bacterial emulsion is made from a twenty-four-hour slant agar growth (in all cases except tubercular bacilli) by shaking up the culture with 2 or 3 c.c. of normal salt solution and then churning the fluid by forcing it in and out of a fine capillary pipet (Fig. 2) for about a minute to break up clumps of bacteria. This milky fluid constitutes the bacterial emulsion.

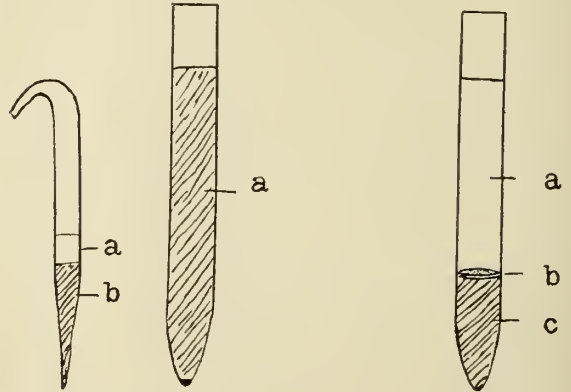


Figure 1. Figure 2.

Figure 3.

Fig. 1.—Capsule for collecting blood, after being centrifuged. a, The clear serum above the clot b.

Fig. 2.—Glass tube for washing leucocytes. a, The mixture of blood and citrate-salt solution before being centrifuged.

Fig. 3.—The same as Fig. 2, after being centrifuged. a, The serum and salt solution; b, the film of leucocytes lying on the surface of red cells, c.

The leucocytes are obtained as follows: A solution of 85 per cent. sodium chlorid and 1 per cent. sodium citrate is prepared. A small tube (Fig. 3) is filled about two-thirds full of this solution. The remainder of the tube is filled with fresh blood drawn from the finger or ear. This is thoroughly mixed together and centrifuged. The solution containing the blood serum will be in the upper part of the tube; the red blood cells will be in the bottom. On top of this there will be a tiny gray film containing leucocytes. The clear fluid is drawn off with a capillary pipet, taking care not to disturb the films of white cells. This little tube is again refilled with an .85 per cent. salt solution and mixed with the red and

white cells by gently everting the tube two or three times to remove the remainder of blood serum and also the sodium citrate. This tube is again centrifuged, when the three layers will again separate (Fig. 4). The upper clear solution is removed as before, leaving film of white cells undisturbed, which is called the "cream." We now have the serum of the patient, and also of the normal persons, in the capsule, the bacterial emulsion in the culture tubes, and the leucocytes, or "cream," in the small glass tube. We now prepare two capillary pipets by drawing out a one-fourth-inch glass tube, and draw a fine line about half an inch from their tip (Fig. 5). By means of a rubber bulb on the ends of these

portions of serum, which contains the opsonin, bacterial emulsion and washed leucocytes or "cream."

These are now labeled and incubated for fifteen minutes at a temperature of about 37 degrees C. At the end of this time the tubes are taken out, the ends broken off, and the contents of each tube smeared over the surface of a clean glass slide by means of the glass rod (Fig. 8). These smears are allowed to dry and are then dipped in wood alcohol in order to fix them. We have tried many stains, but the following is the simplest and seems to give universally good results. Cover the film for about a minute within an aqueous solution of methylene blue, wash in



Fig. 4.—Capillary pipet.

pipets we are able to draw up the different fluids. In one pipet we draw in enough of the patient's serum to reach the mark on the tube, then let in a bubble of air, next the same quantity of cream, then the same quantity of bacterial

water, then cover the slide for about half a minute in a solution of picric acid (concentrated solution of acid, 1 part, in water 7 parts). The films are then dried with filter paper and are ready to be examined under oil-immersion lens.



Fig. 5.—Method of drawing out pipets.

emulsion (Fig. 6). All of these are now drawn up to the wide part of the tube, where they are churned back and forth gently in order to insure perfect mixing. They are next forced down the capillary portion of the tube (Fig. 7), the end of which is sealed in a bunsen flame. In the other capillary pipets a similar mixture is made, except that the patient's serum is replaced by the "pool." When the "pool" is taken from two persons the capillary tube can be filled half way up the mark with the first, and the rest of the distance with the second. The contents are then mixed and the ends sealed as before. We now have two capillary pipets, each containing equal

We now have the two slides, one containing the mixture of leucocytes, bacteria and patient's serum, the other leucocytes, bacteria and normal serum. On examining one of these under the microscope we see that most of the leucocytes contain bacteria in a fairly constant number. We now count the total number of bacteria in 50 leucocytes. This is done for each slide; the average number of bacteria per leucocyte constitutes the phagocytic index. The ratio of the phagocytic indices equals the opsonic index. For example, if the slide containing normal serum or "pool" gave a count of 400 bacteria to 50 leucocytes the phagocytic index would be 8; that is,

an average of 8 bacteria per leucocyte. If on the slide containing the patient's serum 50 leucocytes contained in 200 bacteria the phagolytic index would be 4. The ratio of these phagolytic indices would be 8:4 or 1:5. The phagolytic index of the normal serum being taken as one, the opsonic index of the patient's serum would, therefore, be .5. This method applies practically to all forms of bacteria except the tuberculosis bacilli. In taking the tubercular opsonic index the only difference is in the preparation of the emulsion of bacteria, which is sometimes very difficult.

We have used the dead bacilli which were the residue from the "old tuberculin," kindly furnished us by Parke, Davis & Co. A small por-

placed in a bulb, which is sealed and sterilized, in order to kill any foreign germ. This is used as a stock emulsion and small quantities are drawn off under aseptic precaution whenever indices are to be made, and the bulb re-sealed. In making the index this emulsion is used the same as with other forms of bacteria, except that in staining the slides the carbol fuchsin, alkaline methylene blue method is used in the same way as in staining sputum. The count and estimation is made as above described.

In making capsules and glass pipets ordinary glass tubing is used, one-eighth inch tubing for the former and one-fourth inch for the latter,



Fig. 6.—Pipet filled, a, bacterial emulsion, b, washed leucocytes, c, blood serum.

tion of these bacteria are washed on a filter paper several times with water to free them from glycerin; they are then ground in an agate mortar for at least ten minutes, to break up the clumps. Formerly we ground these for an hour and a half, but since we have devised a shaking machine we have been able to break up the clumps with much less work (see Fig. 9). A cork is per-

and these are drawn out in an ordinary bunsen flame. In making pipets a piece of tubing about five inches long is taken, heated in the middle until thoroughly softened, and then drawn out until the required caliber is reached (Fig. 5). All bending and drawing out of glass tubing should be done after the tube has been taken out of the flame.



Fig. 7.—Pipet containing mixture ready to incubate.

forated and placed tightly on the revolving rod of the centrifuge. A heavy needle is stuck into the cork about one-fourth of an inch from the center. A tape is tied about a small thin glass vial that is to contain the emulsion. One end of the tape is thrust over the needle, the other end is fastened to a rubber band, one end of which is attached to the wall. The revolving cork, with its eccentric needle, will give an extremely rapid vibration to the contents of the bottle.

The ground emulsion is placed in a small stoppered vial, with three or four glass beads, and shaken for half an hour, and then allowed to settle. The supernatant fluid is drawn off and

PREPARATION OF THE BACTERIAL VACCINE.

Vaccine for staphylococcus, streptococcus, colon bacilli, gonococcus and pneumococcus are all prepared in the same way. One or two slant agar tubes are planted with fresh culture of the bacteria from which the vaccine is to be made. After these are grown for twenty-four hours 2 to 3 c.c. of sterile normal salt solution is put into the test-tube; the tube is then shaken from side to side, which will cause the bacteria to leave the agar and float in the salt solution. A very fine capillary pipet with a rubber bulb at the top is now used to churn this emulsion back and forth

by alternating pressure and suction on the bulb. to break up the clumps of bacteria. This will produce a milky fluid, which is allowed to stand for ten or fifteen minutes to allow the clumps and sediment to settle. The upper layers of the emulsion are drawn off and placed in a small sterile bottle.



Fig. 8.—Glass rod for spreading the incubated mixture on the slide.

The next step is to standardize the vaccine. In order to do this the strength of the solution just prepared must be estimated. In order to do this we take a capillary pipet, mark it a short distance from the end and draw up fresh blood from the puncture in the finger to the mark, and



Fig. 9.—Shaker for breaking up clumps of tubercle bacteria.

equal quantity of bacterial emulsion is drawn up in the same tube. The contents of the tube are then blown upon a perfectly clean glass slide and thoroughly mixed up, drawing it backward and forward into the tube several times. The mixture is then smeared evenly over the glass slide,

fixed and stained with gentian violet. The slide is now examined under the oil immersion lens. The eyepiece of the microscope is replaced by one having a square diaphragm, or one containing



Fig. 10.—Ocular diaphragm used in estimating the number of bacteria in vaccine.

four cross-hairs, marking the field with a central square (Fig. 10). The slide is now examined and a number of red cells and bacteria are counted in about twenty successive fields. The ratio between the total number of red cells counted, and bacteria, will equal the ratio between 5,000,000 and the number of bacteria in a cubic mm. By multiplying these figures by a thousand it will give the number of bacteria per cubic cm. of the original emulsion. This is then diluted so that 1 c.c. of bacterial emulsion will equal the maximum dose for the particular or-

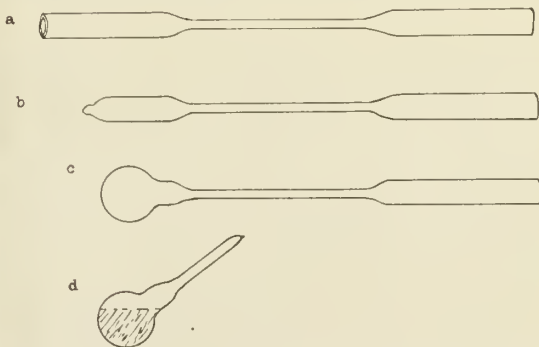


Fig. 11.—a, b, and c. The three stages in making the vaccine bulbs. d. The bulb filled with vaccine and the end sealed.

ganism being prepared. This dilution is made with normal salt solution. With most workers when this point is reached the vaccine is sterilized by heating and cresol or lysol is added for a preservative, and the whole kept in a tightly-corked bottle ready for use.

We have devised a plan that does away with the preservative, which often causes severe local irritation and at the same time avoids any contamination of the vaccine. Out of a quarter-inch glass tubing we blow glass bulbs, into which we seal the vaccine (Fig. 11). In making these the tube is drawn out, making a diameter of about an eighth of an inch. About half an inch of the tube below this neck is sealed, heated and blown into the form of a bulb. This is done by the mouth placed at the other end of the tube. The bulb is broken off at the neck and is ready to receive 1 c.c. of the emulsion by means of our home-made pipet (Fig. 12).

The pipet is made out of quarter-inch glass tubing, and the curve above the bulb makes it easier to handle the fluid more accurately. A 1 c.c. mark is made by standardizing it against an ordinary 1 c.c. pipet. After the emulsion has been placed in the bulb the ends are sealed in a blowpipe. These bulbs now contain one dose of

2 mg. of dead tubercle bacilli suspended in 1 c.c. of fluid. This is diluted with normal sterile salt solution, so that 1 c.c. contains 1/500 mg. This is bulbed the same as the other form of vaccine. When smaller doses are required the amount is measured in the hypodermic syringe.

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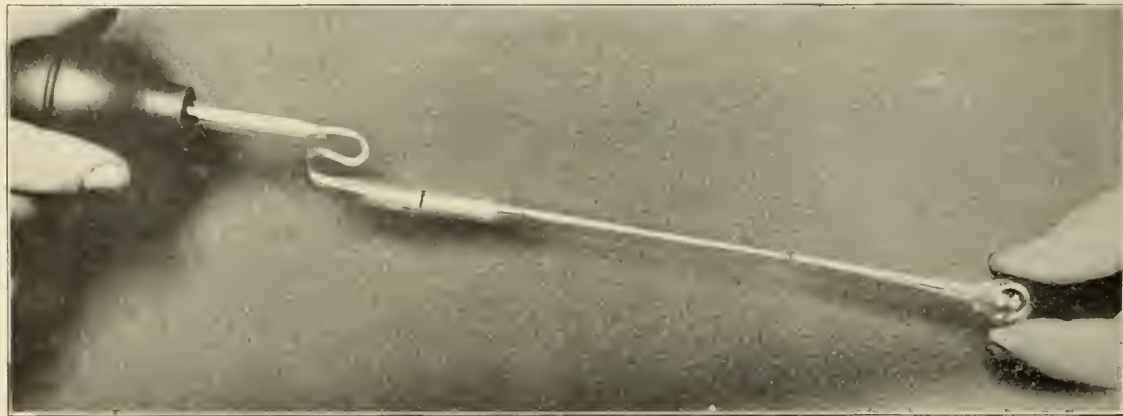


Fig. 12.—Filling bulbs with vaccine with a 1 c.c. pipet.

the emulsion, but the bacteria are still living. The next step is to kill them by heat. In order to do this they are placed in an oven, which is heated to 70 degrees C. for half an hour. We now have the finished vaccine. After cooling, the contents of two bulbs are put into a culture tube and incubated, to be sure of perfect sterilization.

These bulbs keep indefinitely. When they are to be used the neck is filled, broken off, and the contents drawn out with a sterilized hypodermic.

The vaccines are generally given in the left arm, the skin having previously been cleaned with lysol, water and alcohol. The puncture is sealed with collodion. In making tubercular vaccine, or New Tuberculin, we start with a concentrated product that we obtain from R. E. Rhode, 504 N. Clark Street, Chicago. This consists of

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THE VALUE OF THE MICROSCOPE AND TEST TUBE IN DIAGNOSIS.

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In presenting a paper on this subject, some hesitation is felt, for the reason that, being engaged in laboratory work, an expression of opinion might be considered biased. Deeds speak louder than words in any achievement, and it is

undoubtedly true that the clinician who has used laboratory methods extensively and become accustomed to assign to them their true value could give a broader opinion as to their value than the microscopist himself. With this preface and understanding, the writer will venture to give his ideas as to the proper sphere of laboratory diagnosis in clinical medicine to-day.

The first consideration is the personnel of the microscopist or chemist. The old saying, "The microscope does not lie," holds good, but upon "the man behind the gun" depends the responsibility of properly preparing the specimens for examination. He must have the proper technic and the necessary experience and knowledge to be able to draw the right conclusions. He must also have the courage to say, "I don't know" when he can not reach these conclusions.

It has been said that "to become a skilled clinician two things are necessary. The first is skill in the art and technic of clinical medicine, which can only be acquired by long and careful practice at the bedside. The second is the ability to judge disease in accordance with biologic principles. By this is meant that all clinical knowledge must rest on the exact sciences of anatomy, physiology, chemistry, pathology and bacteriology, and that, without these, technic in medicine would avail but little."

To be a successful clinician one must be able to interpret intelligently the information obtained at the bedside. It is equally important and necessary to be able to judge the disease from the standpoints of anatomy and physiology. Without this, medicine would necessarily fall back to the empiricism of the ancients, and the physician who neglects either of these can not do the best for the patient or himself.

In the daily routine of a physician's work he often feels the need of recourse to laboratory methods in clearing up some point in diagnosis. Indeed, at times the diagnosis depends entirely on the microscope or test tube. How often have we found tubercle bacilli in the sputum of an apparently healthy individual who complains of a cold or slight hoarseness. Or albumin and casts in the urine when he complains of headache, or in the course of an insurance examination. These things have become so common nowadays that they are overlooked in passing judgment on laboratory methods.

The laboratory methods of diagnosis have made rapid strides in the last few years, and few are the physicians who have not on their shelves works on "Clinical Diagnosis," test tubes and reagents for a few of the ordinary tests, and

perhaps a microscope. In many cases, however, the physician is too busy to take the time for this work, or if he does he finds that he has grown "rusty" on the technic and that his reagents have spoiled.

In the centralized communities these difficulties have been obviated by the establishment of laboratories in charge of men trained in this line of work. In these places the work can be done expeditiously, and the conclusions can be considered fairly reliable. In order to be most reliable, the closer the relations between the laboratory worker and the clinician the better able will both be to draw the right conclusions.

There are many intelligent physicians who think there is no necessity for the microscopist to know anything about the clinical history of the case, and yet, no matter how many correct opinions have been given, if the microscopist makes one mistake, the physician's confidence in his ability is destroyed. While it is true that many specimens require no attached history, yet, when some especial point is to be elucidated, the more the microscopist knows of the case the better able he will be to give satisfaction.

This entire proposition of accompanying history resolves itself into that of the patient, who when asked by the doctor what he complains of, what are his symptoms, replies, "You are the doctor; you tell me what is wrong." Many able pathologists refuse to make certain examinations unless the history accompanies the specimen. Not only is it important for the pathologist to understand the case he is dealing with, but it is more important for the clinician to be able to interpret correctly the laboratory findings. The pathologist's duty ends when he reports his findings, and unless requested to do so he is not at liberty to draw conclusions as to prognosis, treatment, etc. The laboratory findings usually corroborate the clinical diagnosis. Sometimes the findings are obscured by complicating conditions, while at other times they are only of scientific interest and afford no aid in treatment. In the latter case the physician should not feel that the microscopist has failed him, for negative findings are sometimes just as important as positive findings.

One of the difficulties sometimes met is that the practitioner fails to recognize the limitations of the microscope or test tube. Among the things along this line that the writer has had to deal with is the request to make several different examinations from one specimen. It should be remembered that certain examinations require special preparation of the specimens. This is espe-

cially true in blood examinations. The percentage of hemoglobin or number of cells per c.mm. can not be estimated from a dried film or a coagulated specimen of blood. Neither can insanity or scrofula be demonstrated in the urine. Nor can a diagnosis of typhoid fever be made from the urine alone.

However, laying aside these extreme instances, it is also true that the physician does not always realize how many valuable pointers can be elicited from laboratory examinations, and when the time finally comes when the laboratory worker is fitted into his allotted sphere as consultant to the clinician then only will the full appreciation of laboratory methods be brought out.

The specialty of "internal medicine" has been developed in recent years simply by skilled clinicians taking full advantage of laboratory methods, establishing private laboratories, and there working out difficult problems with the clinical and laboratory findings closely associated. This the general practitioner can do and is doing to a limited extent. Urinary examinations are perhaps by far the most frequent laboratory procedures among practitioners. In urine analysis as in other laboratory work, the method of collecting the specimen depends on the information desired. For a bacteriologic examination a single fresh specimen is collected, using aseptic precautions and at times catheterization. A fresh sample is also best for microscopic examination of the sediment and for testing for acidity, albumin or sugar. For general qualitative and quantitative examination to determine kidney function, general metabolism, etc., a twenty-four-hour collection is necessary.

The best procedure for general urinary work is to collect a twenty-four-hour sample and in addition a single fresh sample at the close of the twenty-four hours. One of the most important points brought out is the amount of urine passed in twenty-four hours. Many a case of toxemia exists because not enough water is ingested to flush the system.

The simple test for albumin is of great aid in making a diagnosis of nephritis, yet the presence of an albuminuria does not always mean nephritis. Nor does the absence of albumin in a single specimen exclude nephritis. The writer has seen a number of cases in which albumin was present only at occasional intervals, while casts were present all the time. The microscopic examination is, therefore, the important thing, and the sooner insurance companies realize this the safer will be their risks.

The nitric acid layer test is the most reliable albumin test, although Tanret's reagent is a more delicate test for special laboratory work. Fehling's solution is the common test for sugar. But a diagnosis of diabetes must not be made too quickly when this test gives a slight reaction, for the reason that other things, namely, a concentrated urine and certain drugs will reduce Fehling's solution, especially if the boiling be prolonged or too much urine added. In these cases the phenylhydrazene test should be used to verify the Fehling test. The phenylhydrazene test is, however, too complicated for general use.

Another important test is for indican, which when found in pathologic quantities is evidence of intestinal toxemia. Other important tests are the bile test, blood test, Diazo reaction, acetone and diacetic acid reactions, etc. The amount of total acidity often points the way to other special examinations. When the metabolic processes are in question, the amount of urea, uric acid, phosphates, chlorids, etc., passed in twenty-four hours should be ascertained.

Another important field for laboratory diagnosis which is neglected is that of blood examinations, by which many valuable hints can be obtained. By the use of a simple instrument like Gower's hemoglobinometer or Tallquist's paper scale, the percentage of hemoglobin can easily be ascertained. This is often important, for instance in neurasthenia, where the skin is pale while the blood is concentrated. The presence or absence of a leucocytosis is often of vital importance in operative cases and also where differential diagnosis must be made between such diseases as malaria, typhoid fever, or septic infection. In uncomplicated cases a marked leucocytosis absolutely rules out malaria or typhoid fever. When a leucocytosis exists a differential count should be made from a stained blood film to determine the kind of leucocytes in excess. For instance, an excess of neutrophilic leucocytes points to suppurative inflammation. An excess of lymphocytes points to disease of the lymphatic system, and the presence of numbers of large lymphocytes or myelocytes makes a diagnosis of leukemia.

In pernicious anemia we find a low percentage of hemoglobin and numerous nucleated red cells, while in secondary anemia we usually find only the low percentage of hemoglobin. The Widal test for typhoid fever is made from the blood serum. This test, while not absolutely accurate, is still the most reliable laboratory method for typhoid. It should be made after the first week of fever, and can be made either from a

drop of dried blood or by collecting the fluid blood in a glass capsule. The microscopic examination of blood is made from a dried film on a cover glass or slide. An easy method is to place a drop of blood in the center of a slide and draw the edge of another slide across it at an angle of 45 degrees. It should be remembered that these films should be made as thin as possible, and also that blood films, whether on slides or cover glasses, should not be left together, for the reason that, unless they are separated and dried in the air, the slow drying which occurs when they are together allows the blood to coagulate and the cells to crenate, rendering the film absolutely worthless for examination.

The malarial plasmodia can be looked for either in fresh blood or in the dried film. For routine work the double stain of eosin and hematoxylin is to be recommended, and for malarial plasmodia the thionin stain.

The scope of this paper does not permit of the description of detailed methods of examination, so that only some of the most essential points in the examination of the different excretions will be touched upon. In the feces, for instance, the color and the presence or absence of free bile will indicate the state of liver function. The form, density and color will indicate the degree of constipation. The presence of pus, mucopus, mucus or blood in appreciable quantities indicates varieties of intestinal inflammation. Microscopic examination will reveal to some extent the state of pancreatic digestion. Recently much attention has been given to the tests for occult, i. e., old changed, blood in reference to the diagnosis of ulcer or cancer of the upper digestive tract. Parasites and their eggs are found by microscopic search, also bacteria of various kinds, including tubercle bacilli.

The examination of sputum, including bronchial and throat secretions, is another field occupying an important place in clinical diagnosis. Tuberculosis of the throat or lungs is many times diagnosed exclusively by the microscope; also other bacterial infection of the respiratory tract. The morning sputum is to be preferred for these examinations. Two separate stains should be made, one for tubercle bacilli and the other for other bacterial forms. The cellular constituents and other characteristics, like the presence of elastic fibers, indicative of degree of lung destruction, can be studied if desired. Sometimes it can be determined whether or not pus comes from an abscess. In studying pus, exudates, etc., for bacterial infection, care should be taken in the collection. Sometimes a couple

of smears or slides will answer the purpose. At other times the culture characteristics of bacteria must be studied before making a diagnosis. Thoroughly aseptic precautions must be used in collecting these specimens. The receptacle must be sterile, and if the specimen is collected on gauze or cotton it must be placed in a bottle and tightly corked to prevent evaporation.

One of the most difficult of all bacteriologic examinations is the diagnosis of gonorrhea in the female, especially the chronic form. There is always a multitude of bacteria in a vaginal or cervical secretion which simulate the gonococcus to such an extent that it requires great care and precision in the differentiation. Many pathologists hesitate to make a diagnosis of this sort without a thorough history of the case.

The field of stomach analysis is another attractive opportunity to use scientific diagnosis and therapeutics. It is important to know whether the hydrochloric acid is increased or diminished before giving acids or alkalies, stimulants or sedatives. It is also important to know whether a pain is due to an ulcer or to a simple inflammation. By the examination of the stomach before breakfast, and by the use of the test meal, we can gauge the digestive power of the stomach and the abnormalities of the gastric juice. By making a complete analysis of the stomach an early diagnosis of gastric cancer can often be made, and also important information in connection with disease of other abdominal organs. The writer has in mind two cases in which there was a question of stomach disease, possibly cancer. In both cases a thorough stomach analysis in connection with the history and physical examination enabled a diagnosis to be made of cancer of the abdominal viscera adjacent to but not involving the stomach, and which was proven at autopsy. In this sort of work the pathologist must have access to the patient in order to give the final opinion, otherwise he can only report the findings of the stomach analysis, which must be compared with all other data before a diagnosis is made. Recently considerable attention has been given to the examination of exudates and transudates for their chemical constituents, bacterial content and cellular constituents, so-called cytodiagnosis. This differential diagnosis between an exudate and transudate is easily made, since an exudate is an inflammatory product and resembles blood serum, while a transudate is due to circulatory or osmotic changes and contains a considerably larger proportion of water. It is of considerable importance in diagnosis to know whether a given fluid

is due to inflammation or to circulatory changes. This differentiation can be made absolutely in competent hands. In the case of exudates it is possible by cytodiagnosis, i. e., by the differential count of the sedimented cellular elements, to indicate the kind of infection. The writer has in mind two cases in which the cerebrospinal fluid was examined in this way. One showed an excess of small lymphocytes indicating a tubercular infection, proven by the presence of tubercle bacilli, which was also demonstrated at autopsy. The second case showed an excess of neutrophilic leucocytes indicating a pus germ infection which was corroborated by finding a staphylococcus in smears and cultures, and subsequent symptoms indicating this sort of infection. The wholesomeness or nutritious value of mother's milk is often a question of import to the nursing infant. The use of a small milk-testing apparatus will give this information.

The examination of tumors and other pathological tissues requires a large amount of experience. The medical student at this time gets an insight into this work which he soon forgets unless the practical work is carried on after he leaves college, so that he must be very cautious about giving opinions on important pathological sections. After a considerable experience in this line of work the writer can recall several mistakes, some of which should have been reported that "a differentiation could not be made as between certain pathological conditions," while others were inexcusable except on the ground that there is no man—no matter what his station in life—but makes mistakes. It is by our mistakes that we gain knowledge, and it is safe to say that a painstaking worker will hardly make the same mistake twice.

It comes within the scope of this paper to mention among the newer pathological methods the opsonic therapy as advocated by Sir A. E. Wright of London, which, briefly stated, consists in treating infections by inoculating the patient with minute doses of dead cultures of the germ causing his infection, and thus by toxic irritation causing an increase in the protective properties of the blood. This increase of the protective agencies, which are called opsonins, produces an acquired immunity and enables the system to throw off the infection. The size and frequency of the doses are regulated by testing the opsonic power of the blood by means of a unique laboratory method devised by Wright. The limitations of this vaccine therapy have not yet been established, but it bids fair to occupy an important rôle in the treatment of infections.

In this brief résumé of the importance of the microscope and test-tube, mention has been made of their use in relation to medical diagnosis. This is by no means the limit of their usefulness. Their use in the development of the arts and sciences and in the public health crusades have been and are of incalculable value. No matter what criticism is offered to their use, the fact remains that their use has made it possible for the physician of to-day to understand the causes and effects of diseases, and to place in his hands the most reliable weapons for their extermination.

THE OPHTHALMO-TUBERCULIN REACTION.

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In the *Berliner Klinische Wochenschrift* for May 20, 1907, C. Von Pirquet describes a new method for the diagnosis of tuberculosis in children. He vaccinated a child with tuberculin. At the point of inoculation appeared a papule like the papule of vaccinia. At first its color was bright red, then dark red, and gradually it faded out. He used two drops of diluted old tuberculin on the skin and then scarified the latter. At the time of his report he had made the test 500 times in infants, securing positive reactions in nearly all. The most marked reactions were in tuberculosis of the bones and glands.

In discussing the above paper before the Berlin Medical Society on May 15, 1907, Dr. Wolff-Eisner suggested the diagnosis of tuberculosis by the instillation of tuberculin into the eye. But he does not seem to have followed up his suggestion. The observations of Pirquet have been confirmed numerously.

Engle¹ and Bauer report that in 58 cases in infants vaccinated for the diagnosis of tuberculosis, six positive reactions occurred. They also report that in 280 children between the ages of 3 and 14 they secured results even more satisfactory than in the first series above mentioned.

Ferr and LeMaire,² in a series of 49 cases vaccinated thus, obtained the Von Pirquet reaction in 29, and in 34 out of 39 cases the diagnosis was confirmed by the subcutaneous injection of tuberculin.

Bandler³ used the Pirquet reaction in 26 cases

1. *Berliner Klinische Wochenschrift*, Sept. 16, 1907.

2. *Presse Medicale*, Paris, Sept. 28, 1907.

3. *Deutsche med. Wochenschrift*, Berlin, Oct. 3, 1907.

of tubercular skin affections and 37 non-tubercular. In 22 out of the 26 there were positive reactions. In the series of 37 only 15 failed to develop the characteristic reaction.

Dr. Louis Warfield, of St. Louis,⁴ after trying the Pirquet reaction in 138 cases, concludes as follows: "(1) The cutaneous tuberculin reaction of Von Pirquet is a perfectly harmless procedure. (2) It is of value in the so-called pre-tubercular stages. (3) All adults do not react to vaccination. (4) No reaction precludes tuberculosis in an active form so far as we can be sure of the results of any one test. (5) A positive test does not always mean tuberculosis; it may mean a healed lesion somewhere in the body, but it calls attention to the possibility of later tuberculosis; it also draws attention to the probable tuberculous nature of the case, and a more careful examination of the patient will sometimes reveal the previously overlooked lesion."

The discovery is certainly of great value and marks a distinct advance in the diagnosis of tuberculosis. What will be referred to in the Calmette reaction with reference to certain eye diseases of obscure origin will apply here also, for the Von Pirquet reaction no doubt will serve to clear up the diagnosis and the etiology of the same.

The Von Pirquet reaction is the forerunner of the Calmette reaction.

On June 17, 1907, Calmette, of the Pasteur Institute of Lille, France,⁵ reported that if 1 per cent. aqueous solution of tuberculin, precipitated with alcohol previously, were instilled into the eye, congestion of the palpebral conjunctiva followed in about three hours in a tuberculous individual. The maximum reaction is reached in ten hours and disappears in from twenty-four to thirty-six hours. The first sign is reddening of the caruncle, which becomes covered with an exudate serofibrinous in character. This spreads to the inferior cul-de-sac in about six hours. The reaction lacks pain.

C. Lantemisse, on July 23, 1907, reported to the Paris Academy of Medicine that he had secured the same reaction with the typhoid bacillus. It may be that the ophthalmic reaction to the typhoid bacillus will displace the Widal test.

Comby⁶ writes that he has tried the Calmette reaction in a large number of children. He prefers the $\frac{1}{2}$ per cent. solution of tuberculin which he has used in his last series in 138 cases in children. In 132 children a positive reaction was secured in 62. Autopsies in 4 cases proved the

diagnosis. In 70 cases it was negative, and six autopsies confirmed the negative findings in those 6 cases.

McLennan⁷ reports 105 observations as follows: 70 with the Calmette reaction, 20 with the old and 10 with new tuberculin. His conclusions are: "First, for the most part, the Calmette claims are fully justified; second, the test apparently reveals the presence of tuberculous lesions that are benign and unsuspected from a clinical point of view, as well as those which are more obvious; third, in those cases in which a subcutaneous injection of old tuberculin has given a positive reaction, or a negative one, the same result has followed the application of the ocular test.

Webster and Kilpatrick⁸ found the reaction present in all cases where bacilli were found in the sputum.

E. Franke⁹ reports experiences confirming the observations of others.

Malan tested 50 cases with positive reactions in tuberculous cases, including tubercular meningitis, peritonitis and pleurisy. Advanced cases showed no reaction.

Alessandri's 15 cases merely confirm Malan's. Eyre, Wedd and Hirtz¹⁰ report results in 138 cases: 63 were positive and 75 negative. Every case of advanced tuberculosis was positive. The test causes the same reaction as the subcutaneous injection as to the opsonic index of tuberculosis. The negative phase is lengthy.

F. Kuhle¹¹ reports positive reactions in 90 per cent. of 165 tubercular cases. The negative cases were the advanced ones.

Smithies and Walker, of the University of Michigan,¹² report observations based on 242 cases. They had 198 negative reactions, but they had tried the test upon a large number known not to be tubercular.

Mainina¹³ applied the Von Pirquet test to 208 cases and the Calmette test to 100 cases. His findings seem to indicate that the active tubercular lesion is diagnosed by the Calmette reactions and the latent foci by the Von Pirquet reaction. He states that Wien and Gunther warn the profession that the ocular reaction is not so simple a matter as first supposed, and cites cases from their experience to prove the same. One patient was a child of 3 with a spinal tumor. The instillation was followed by a chronic catar-

7. Brit. Med. Jour., Dec. 7, 1907.

8. Brit. Med. Jour., Dec. 7, 1907.

9. Deutsche med. Wochenschrift, Nov. 28, 1907.

10. Lancet, Dec. 21, 1907.

11. Deutsche med. Wochenschrift, Dec. 12, 1907.

12. Jour. A. M. A., Jan. 25, 1908.

13. Munchener med. Wochenschrift, Dec. 4, 1907.

4. Jour. A. M. A., Feb. 29, 1908.

5. Comptes rendus de l'Académie des Sciences.

6. Presse Médicale, Paris, Aug. 10, 1907.

rhial conjunctivitis still evident months after the injection. In another patient there was swelling and suppuration, with slight irritation for some time, and finally phlyctenule. The conditions are still far from normal more than three months since the instillation. In a man of 24 the suppurative secretion soon ceased, but it was followed by hemorrhage into the conjunctiva and inflammation for more than a week.

Eisen¹⁴ reports positive reactions in 66 $\frac{2}{3}$ per cent. of cases (45 cases). The reaction in the eye subsided harmlessly in all except two. These two had suffered with conjunctivitis since youth.

Feer¹⁵ warns against the application of the test to scrofulous children. It is liable to set up rebellious conjunctivitis. He recommends here the cutaneous test of Von Pirquet.

Zariboni¹⁶ reports the reaction positive in 23 patients who had symptoms of pulmonary tuberculosis. It was negative in 17 cases with no history of the disease.

In an editorial note attached to the review of the above in the *Journal A. M. A.* for Feb. 8, 1908, occurs the following:

"G. Serafini states¹⁷ that the ocular test is not conclusive in cases of tubercular processes in the bones or joints. He relates particulars of 63 such cases in which it was applied. The reaction was positive in certain gonorrheal articular processes, in which there was nothing to suggest tuberculosis, as also in several cases of senile and other non-tubercular bone affections. He does not attempt to decide whether the positive findings represent a latent tubercular focus or merely an accidental specific reaction. The reaction is less pronounced, the older the tubercular lesion and the severer the anemia. He adds that the instillation of the tuberculin is not as harmless as has been asserted. The inflammatory reaction lasted for a week or so and was liable to reappear later if the eyes were exposed to any source of irritation. One patient with a gonorrheal wrist affection developed an intense catarrhal process in the conjunctiva with blisters and keratitis. The conjunctivitis has occurred in this case as also in a woman of 62 with arthritis without effusion. An intense catarrhal conjunctivitis followed the instillation, with an abscess formation. In a man of 28 with a mild tubercular pulmonary process the instillation produced a reaction not only in the eyes but also in the lungs and glands, with general phenomena. In a few cases the negative response to the instillation differentiated a

gumma or other dubious non-tubercular affections. There was no reaction in three cases of certain but mild tuberculosis."

Napier¹⁸ reports two cases in which he could get no reaction, although the cases had pulmonary tuberculosis. Sometimes, he says, there is violent reaction. He also reports two cases in which there was no local reaction, but a local change like the injection of tuberculin into the system.

Wolff-Eisner and Teichman¹⁹ write upon the "Importance for Prognosis of Ocular and Cutaneous Reaction to Tuberculosis." They took a number of curves and these curves show that the reaction may occur in three ways: first, the specific skin reaction shows an abrupt rise to its highest point in from twenty to twenty-four hours and keeps high for the second day, subsiding on the third, or at the latest on the fourth day; second, this shows a rapid but weak reaction, reaching its highest point in about ten hours and subsiding completely during the second day; third, this is a tardy and continuous reaction, not reaching its highest point until the end of the second day or later, but then persisting at this point for several days.

"The first standard reaction is encountered in most cases of incipient tuberculosis, and in the first or second stages when the disease shows a slow and favorable course, demonstrating that the organism is capable and is struggling against the bacillary invasion. The second weak type of reaction is observed in the third stage of tuberculosis, and in the first and second stages when the resisting powers of the organism are at low ebb. The tardy and prolonged reaction is encountered in cases without any clinical signs of active tuberculosis. The conjunctiva does not show any reaction in this class of cases."

The practical conclusions of the article are that a lively reaction, according to the first type, is a sign of favorable prognosis, as it shows that the organism is waging a vigorous warfare against its invaders, and with the aid of reinforcements from without, supplied by medical care, the prospects are in favor of final victory.

Levy²⁰ reports positive reactions in 80 per cent. of 41 tubercular cases, and in 60 per cent. of 54 cases with dubious tuberculosis. Reaction was positive in 21 $\frac{1}{2}$ per cent. of 235 non-tubercular cases.

Walsh²¹ reports the ocular reaction in the diagnosis of a case of lupus. The reaction.

14. Beiträge für Klinik der Tuberculose, Würzburg.

15. Münchener med. Wochenschrift, Jan. 1, 1908.

16. Policlinico, Rome, Jan. 5 1908.

17. Giord, R., Accad. di Med. Tunn., November, 1907.

18. Glasgow Medical Journal, January, 1907.

19. Berliner Klinische Wochenschrift, Jan. 13, 1908.

20. Deutsche med. Wochenschrift, Berlin.

21. Medical Press and Circular, London, Feb. 19, 1908.

which was decided, occurred in twelve hours after the application of tuberculin.

A. Plehn²³ casts doubt upon the reaction as a specific one for the diagnosis of tuberculosis. He instilled tuberculin as follows: In five cases of typhoid fever with two positive reactions; in five cases of scarlet fever with two positive reactions, one of these recovering afterward under salicylate of sodium; and in six cases of acute bronchitis with three reactions. No tuberculosis was present in any of the above.

For much of the above I am indebted to the Current Medical Literature reviews in the *Journal A. M. A.*

As intimated above, Calmette employs a 1 per cent. solution of old tuberculin in water. However, recently the writer has been using the tablets of purified tuberculin prepared by Parke, Davis & Co. One tablet dissolved in 15 drops of sterile normal saline solution produces the 1 per cent. solution of tuberculin necessary for the test. The bottle and dropper are sterile. Houghton²⁴ describes the preparation of the tablets as follows:

"Well-grown cultures of human tubercle bacilli on 5 per cent. glycerin bouillon is concentrated over a water bath at 80 degrees C. to one-tenth of its volume. Then this is filtered to remove germ bodies. To a given volume of the filtrate is added 94 per cent. alcohol, which throws down a voluminous precipitate. Decant the alcohol. Redissolve the precipitate in distilled water. Filter through porcelain. The filtrate is again precipitated with alcohol (94 per cent.); precipitate is washed with absolute alcohol and ether and dried quickly in vacuo. The residue is powdered aseptically and manufactured into tablets."

The test must be carefully made. It is better to drop the solution into the patient's eyes while the patient is lying on his back to avoid the expulsion of the drop of tuberculin by gravity. The upper lid is lifted and the lower lid held away from the eyeball and the drop placed upon the ocular conjunctiva at the upper portion of the outer canthus. The drop is gently manipulated by the eyelid to secure even distribution. The eye is then closed for a few minutes. The drop may be instilled with the patient's head thrown far back. Under no circumstances should the patient be allowed to rub the eye. There are precautions to be observed. Before instilling the tuberculin the eye and adnexa should be carefully inspected, for if inflammation exists the tuberculin had better not be instilled into that

eye. Moreover, it will be wise to observe whether the patient be scrofulous. If so, according to J. Citron,²⁵ the solution should be one-fourth as strong as ordinarily used.

Several hours after the instillation (not less than three hours) there is a swelling and redness of the caruncle and the conjunctiva of both eyelids and eyeball. There may be a sero-fibrinous secretion also present in the lower cul-de-sac. Calmette states that the reaction appears in from three to six hours. In one of our cases the reaction was delayed for thirty-six hours, and in two for twenty hours. In one case we had a reaction in one hour and thirty minutes. Calmette further states that the reaction disappears in forty-eight hours, which, as above noted, will not likely always be the case. Several writers²⁶ describe four stages or degrees of reaction, the mild, moderately severe, intense, and very intense. In the latter the conjunctiva becomes chemotic and a month elapses before the conjunctiva resumes its normal appearance.

The following stages may be noted in the reaction: First, in about three hours the edges of the lids and inner canthus may smart; second, lachrymation may follow; third, caruncle and surrounding conjunctiva will be moderately red; fourth, in another two hours photophobia may develop; fifth, a sero-fibrinous exudate appears over the caruncle and in the lower cul-de-sac; sixth, the lids become slightly swollen; seventh, in eight or nine hours the conjunctival vessels become visible, the conjunctiva becomes a dark red; eighth, intense itching; ninth, if rubbed the eyes become intensely inflamed, with swelling of the lids.

No rise in temperature has been noted in the cases where a positive reaction has been secured. The reaction will not take place in the moribund. The old tubercular will not likely manifest it as well as the patient with acute miliary tuberculosis. A patient of Dr. W. F. McBride, of Dayton, Ind., refused to show the reaction, notwithstanding the fact that he has a tubercular knee joint.

The meaning of the reaction from the general practitioner's standpoint may be summed up in a few words, quoting from a recent review in *The Journal A. M. A.* of an article by Calmette²⁷ on the "Importance of the Ocular Reaction to Tuberculin in the General Campaign Against Tuberculosis." He writes of the great advantage of detecting the trouble early, especially in

23. Deutsche med. Wochenschrift, Feb. 20, 1908.

24. Jour. A. M. A., Feb. 29, 1908.

25. Auboret and Lafond, Gaz. Heb. des Soc. Med. de Bordeaux, Aug. 4, 1907, and Auboret and Mogne, Jour. de Med. de Bordeaux, Aug. 25, 1907.

26. Bulletin de l'Académie de Médecine, Paris, Jan. 14, 1908.

27. Deutsche med. Wochenschrift, Berlin, Feb. 20, 1908.

infants to protect them against tubercular parents, for infants are not infected with tuberculosis when born. Moreover, a weeding-out process is possible whereby the infected can be early sent to a sanitarium for the cure of the disease. Calmette further states that to date the reaction has been tried in 10,000 cases without harm.

To the ophthalmologist the meaning is plain also. As far back as 1881 Von Michel²⁸ insisted that tuberculosis is the cause of many cases of iritis. Stephenson²⁹ has shown that chorioiditis is frequently due to tuberculosis. Stock³⁰ has experimentally proven that tuberculosis is the cause of certain cases of iritis, chorioiditis, interstitial keratitis and phlyctenular ulcers. Intractable uveitis may be due to tuberculosis. The Calmette reaction gives us a ready and simple means of determining the presence or absence of tuberculosis in these cases, the other physical signs being absent.

Sydney Stephenson³¹ reports experiences with the Calmette reaction in cases of episcleritis (4), irido-cyclitis (2), and chorioiditis (7). In the cases of episcleritis the reaction was positive in two and negative in two. In the cases of irido-cyclitis all three cases showed positive reactions. In the cases of chorioiditis the reaction was positive four times and negative three times.

Nance and Swift³² report experiences in the following cases: Phlyctenular conjunctivitis and keratitis (4), episcleritis (2), lachrymal diseases (8), tubercle of chorioid (1), interstitial keratitis (1), and optic neuritis (1). There were fourteen positive reactions and eight negative ones.

In other words, the Calmette reaction is capable of being of service in ophthalmology, not to mention otolaryngology.

Like all new discoveries, it has not yet passed the experimental stage. It has been used with recklessness in many cases, and the reports of bad results have in part been noted above. It is not as harmless as it has been heralded to be. In addition to the cases previously noted where bad results have appeared, J. Comby³³ met with excessive reaction twice among twenty-four children. To avoid further trouble he used a 1/2 per cent. solution, and in 108 subsequent instillations no untoward reaction was observed.

De Lapersonne³⁴ collected six cases of ulcerovascular keratitis due to the diagnostic use of

tuberculin in the eye. The vision was not impaired, however. There were, besides, two cases of iridocyclitis. His conclusions are: First, inspect the eye before instilling tuberculin; second, do not apply it to differentiate lesions of the eyeball, deep or superficial; third, the reaction being most marked in children, caution is to be exercised with them. The complications studied did not manifest themselves until ten to twenty days had elapsed.

In the discussion of Calmette's last paper mentioned above, De Lome cited thirty-four cases of excessive conjunctival reaction.

In the March, 1908, *Archives for Ophthalmology*, Dr. Arnold Knapp reports a case of "Interstitial Keratitis After the Use of Calmette's Ophthalmic Reaction," presenting the case to the Ophthalmological Section of the New York Academy of Medicine, January, 1908. The eye was previously healthy. On December 4, 1907, he dropped a 1 per cent. solution of tuberculin into the eye of a 9-year-old healthy German girl. The general reaction was well marked. After ten days corneal infiltration appeared, arranged in three groups near the outer edge. On January 28 they had coalesced, forming three yellowish-gray patches, covered and surrounded by characteristic straight deep-seated corneal blood vessels. The infiltration is progressive, evidently shutting off vision. His conclusion is that the ophthalmic reaction can not be considered harmless.

E. Siadelmann³⁵ calls attention to the fact that the cutaneous or ocular reaction is liable to flare up if tuberculin be injected even weeks after the primary ocular test.

Weber³⁶ states that the test tried on five doctors who sat up late at night to read, show positive reaction, and in three the reaction was very violent. He believes therefrom that the tendency has been to unduly magnify the reaction as a diagnostic test.

Collins³⁷ points out very pertinently that the test is safest in the hands of the oculist, who is able, by examining the eyes previous to the instillation of the tuberculin, to tell whether it be safe to apply the test, i. e., that the general practitioner is not the safest person, after all, to apply it.

In *The Journal A. M. A.*, March 21, 1907, Drs. M. J. Rosenau and J. F. Anderson, of the Hygienic Laboratory of the U. S. Public Health and Marine-Hospital Service, issue a warning relative to the ophthalmic reaction. Their ex-

28. Graefe's *Archives for Ophthalmology*.

29. Carpenter's and Stephenson's *Reports of the Society for the Study of Diseases in Children*, Vol. 1, 1901.

30. Graefe's *Archives for Ophthalmology*, June 18, 1907.

31. *Ophthalmoscope*, December, 1907.

32. *Journal Ophthalmology and Oto-Laryngology*, February, 1908.

33. *Presse Med.*, Paris, July 17, 24 and Aug. 10, 1907.

34. *Presse Medicale*, Paris, December, 1907.

35. *Deutsche med. Wochenschrift*, Berlin, Feb. 13, 1908.

36. *Brit. Med. Jour.*, Feb. 15, 1908.

37. *Medizin Klinik*.

periments show that the conjunctiva becomes hypersensitive by the application of tuberculin, i. e., if no reaction be obtained by the first application, a second application days hence will produce it. They experimented upon twelve adult males in apparently good health. No reaction followed the instillations. In fifty-one days they repeated the experiment upon the same twelve. Ten of the twelve gave a typical reaction. They conclude that we must be cautious not to condemn the tuberculin of one manufacturer if it gives negative results when a second application of another make gives a reaction which is positive. The last paragraph of their article is worthy of quotation entire: "The power of tuberculin to sensitize the conjunctiva is a beautiful example of the usefulness of a state of anaphylaxis (local hypersusceptibility). The conjunctiva or any other tissue in such a condition of hypersusceptibility is armored against bacterial invasion. Thus if a tubercle bacillus lodges on a tissue having the power to react at once, the tubercle bacillus would immediately be surrounded with the protecting humors and cells of the body. In other words, the natural immunizing agencies of the body would at once be concentrated on the spot where they are most needed."

The writer's personal experience is limited to a few cases, some of which are jointly with Prof. S. Burrage of Purdue University, who very kindly prepared the solutions used before the advent of the tablets of purified tuberculin. Carl B. was brought by his physician, Dr. E. Parker, of Oxford, Ind., because of an intractable ulcer of the entrance of the right nostril, involving also the upper lip. A 1 per cent. solution of tuberculin was instilled into the left eye. No reaction occurred for thirty-six hours, but it was then positive, the serofibrinous discharge appearing in the lower cul-de-sac and over the caruncle. Examination of the scrapings from the ulcer by Professor Burrage showed tubercle bacilli. Twelve other tests were made on members of the Indiana State Soldiers' Home. These were on undoubted cases of tuberculosis. In these we had three positive reactions.

CONCLUSION.

The value of the ophthalmo-tuberculin reaction as a diagnostic test for tuberculosis can not be ignored. True, some bad results have been reported, but the proportion of them is so small that, beyond a passing notice as to care in making the test to avoid similar results, they may be almost wholly disregarded. The contention is just that the oculist makes the test because the

average general practitioner does not consider himself competent to thoroughly inspect eyes to detect contraindications to the use of the ophthalmo reaction.

WHAT THEY SAY ABOUT US

Another state journal has appeared. To those who have known its editor as the distinguished secretary of the Section on Ophthalmology of the American Medical Association it is not surprising that the new JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION is one of the cleanest, best printed and best edited of medical publications. Dr. Bulson has a genius for practical work, and we congratulate our confrères of Indiana on having secured such an editor. Its editorial pages are as clean as its advertising pages. In medical preparations no advertisement is accepted which has not been approved by the Council on Pharmacy and Chemistry of the American Medical Association. "Blessed be the tie that binds ——" Let the venalists among medical editors rail as they will, the time is coming when medical journals *will clean up or quit*. Congratulations to Indiana and to Dr. Bulson!—*Kentucky Medical Journal*.

WE ARE glad to add to our exchange list THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, the first number of which has just appeared. The great State of Indiana is a little late in entering the field of state association journalism, but that she has come to stay there can be no doubt from the fine appearance of this first number. It contains 48 pages of good, well arranged material, and is fortunate in having an editor of experience, Dr. Albert E. Bulson, Jr., of Fort Wayne. We predict for the new journal immediate and permanent success.—*West Virginia Medical Journal*.

THE maiden issue of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION appeared in January. Dr. A. E. Bulson, Jr., is the editor, and Dr. B. P. Weaver assistant editor. The original articles are by Drs. D. C. Peyton, W. N. Wishard, D. B. Myers, M. F. Porter and J. N. Hurty.

In addition to the work of the editor, there are two editorials by Drs. J. R. Eastman and G. W. McCaskey. The editorial, and in fact all departments, show good work. Dr. Bulson made a good publication of the *Fort Wayne Medical Journal-Magazine*, and with greater opportunities we bespeak a successful future for the new enterprise.—*The Central States Medical Monitor*.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 219 W. Wayne St., Fort Wayne, Ind.

JUNE 15, 1908

EDITORIALS

THE DOCTOR'S VACATION.

In these days of strenuous competition when every medical man wants to do his very best work, not only for the love of his work but for the sake of his reputation and a means of livelihood, what more essential factor obtains than that of the physician occasionally taking an inventory of the measures at hand for conserving his own physical powers? Although notable exceptions are not uncommon, yet the fact remains that our profession is not one that favors longevity, and from a personal standpoint this would not for one moment deter the honest man from entering its portals. But there are the loved ones who are dependent upon us, the few grateful ones to whom our services may have been a help and who likewise feel that our existence is in a way linked with their comfort and well-being, the possibility that we may be fortunate enough to possess even a single attribute that somebody will find worthy of emulating, and lastly the duty of every man to fill his place on earth and do to the best of his ability the work that is set before him. These are some of the reasons why duty demands the conservation of the physician's physical forces insofar as efficient services will permit. Not that we are in the least inclined to take issue with the old saw that "hard work never hurt any man," provided he be willing to heed Nature's warnings, but the doctor after all is but human and an occasional respite will certainly serve to decrease the necessity for Nature's service as monitor.

Equally important is the other benefit to be derived from a well-spent vacation, viz., increased skill. The man who continuously remains at home in the same routine for months or years will necessarily get into a rut from which even voracious reading will not rescue him. And God pity that man who has reached the point in his career where he can no longer profit by seeing the work of other good men! The more a man's practice increases the greater should be the sense of responsibility imposed

upon him by the trust of his patients, and hence the necessity of availing one's self of every opportunity to render more efficient service. And what better way can be adopted of gaining knowledge and skill in medicine than by gathering together and discussing our various successes and failures, profiting by our mistakes and learning how to eliminate them in the future, for another man to be pitied is he who never makes a mistake! Aside from this the temporary change of scene and environment, and the respite from care and responsibility even for so short a time help to fill a man with new energy and determination to do just a little better work than he has ever done before, always profiting by what he has seen and heard from other workers.

Is it not possible that the indefatigable Senn might have saved himself from a rather untimely death had he pursued some such course as that being followed at the present time by Dr. Robert Koch?

This year exceptional opportunities are offered to the medical profession of Indiana, for with the American Medical Association meeting in Chicago little time is lost in travel, much may be gotten in a short space of time, and hence there will be less sacrifice of time for the state meeting at French Lick. As will be seen by reviewing the published program, some excellent papers are in store for us, and with the majority of the members fresh from the Chicago meeting the discussions should be full of interest to every medical man of the state. True it is that *THE JOURNAL* will publish the proceedings and as many of the papers, with discussions, as possible, but the published discussions will of necessity have to be abstracted, and possibly something may have been briefly dealt with in which you are most interested and to the discussion of which you could have added an important part.

No one factor can accomplish so much to promote the good fellowship of the profession throughout the state as the annual meeting, so that to the personal benefit is added that to the general profession of the state by rousing, good, annual meetings. Let us all unite to make this the banner meeting in the history of our live, progressive Indiana State Medical Association, for with the excellent program and pleasant meeting place every one should be able to say upon leaving, that Indiana will not yield the palm to any other state for good fellowship and progressiveness in her medical profession.

THE COLLECTION OF THE DOCTOR'S ACCOUNTS.

We have recently learned that one of the respected and busy physicians of Indiana who has practiced medicine in one locality for forty years admits that he has never sent a statement to a patient or made any effort to collect money due for professional services rendered. Of course it goes without saying that the doctor has on his ledger unpaid accounts amounting to thousands of dollars, most of which are now worthless but many of which would have been paid promptly had an effort been made to collect them. Aside from the fact that such a practice is decidedly unbusinesslike and entirely uncalled for, it is unfair to the members of the doctor's family who look to him for support and a reasonable provision for them after his death: to the doctor himself who receives too little remuneration for his services and is deprived of many things which his earnings, if collected, would procure for him; to the patients who learn to look too lightly upon the value of professional services and who drift into a kind of pauperism as concerns services from medical men; and to the medical profession at large, and the younger medical men in particular, because it makes it more difficult for those who desire to be businesslike and must collect what is due them in order to live, to educate patrons to the belief that physicians, the same as other people, are entitled to reasonably prompt remuneration for services rendered.

There is no good reason why physicians, like merchants, should not render statements monthly and expect or even insist upon some kind of settlement of accounts at the end of ninety days. The doctor is not permitted to owe for several months the butcher, the baker, the groceryman, the drygoodsman, or even the farmer from whom he buys his wood, horse feed or anything else. Why should the doctor extend more leniency to his patrons than the patrons grant him? Even the farmers, who ordinarily are the slowest pay of any class of people, take good care that they receive cash for everything they sell, and the most successful merchant in any line is the one who not only expects but demands prompt payment for his goods. The average doctor, on the other hand, seems to think he is not warranted in asking for any money from his patrons for fear he will offend them, and in return for this short-sighted policy he loads his ledger with many accounts, some of which never were good, many were good once but fail to be good with the lapse of time, and a few only are good after

a long wait because the integrity of the patron, a negligible quantity in many people, does not permit him to defraud even the lenient and unbusinesslike doctor.

It sounds very well to say that you are practicing medicine for the love of it and for humanity's sake, but remember that you owe something to your family and yourself in the way of a real, tangible income from your labors, and last but not least, you owe something to your profession and your patrons. How are new books, instruments and an occasional postgraduate course to be paid for except with cash secured from patrons, and how do you expect to render proper services unless you are progressive? Is it not true that many a doctor who would like to "spruce up" a bit in a professional way is prevented from doing so on account of lack of funds which would be in hand if unpaid accounts of hundreds or even thousands of dollars did not overload the doctor's ledger?

It is time for medical men to get away from the sentimental thoughts which prevent them from considering the practice of medicine a business as well as a profession. It is not undignified nor unprofessional to expect and demand prompt remuneration for services rendered, and the practice of prompt collection of accounts is imperative if the physician is to reach the highest point of success from every standpoint. This does not mean that a physician must not extend leniency where leniency is due, nor charity where charity is due, but it does mean that those who can pay but do not do so because of the leniency of the physician should be made to do so by persuasion or otherwise. No patron who is of the slightest value to the physician is going to offer objection to business methods on the part of the physician, and any physician can better afford to have only a \$3,000 practice and get \$2,500 in cash out of it than he can afford to do a \$6,000 practice and get only \$1,000 in cash out of it. Then, too, the chances are that the man who does the smaller volume of work but is adequately paid for it will do better work, for he realizes that he must give value received, and his extra time and extra income enable him to read, to attend postgraduate schools, and procure the necessary equipment which is required by a progressive physician. He is also more highly respected in his community because of his businesslike methods and his progressiveness which businesslike methods engenders, and he is at the same time doing justice to the family dependent upon him, to himself, to his profession and to his patrons.

HOME TREATMENT OF TUBERCULOSIS.

The impracticability of sanatorium treatment for the great majority of consumptives distributed throughout the country renders its service almost as meager as the so-called "climatic treatment." Hence it is left to the medical profession to devise some efficient substitute that will be available to the vast number who must needs deny themselves the blessings of institution treatment or climatic change. In its issue of May 9 *The Journal of the American Medical Association* has briefly taken up editorially the work of the Committee for the Prevention of Tuberculosis of the New York Charity Organization Society, which contains an account of a subcommittee's twenty months' experience. That part most germane to the subject is contained in the following paragraph:

"One hundred and twenty-seven patients were treated exclusively in their own homes. Out of thirty-five incipient cases, in only eleven did the disease progress, while in twenty-three cases, 66 per cent., the condition of the patient was materially improved at the end of the term. Of eighty cases originally diagnosed 'moderately advanced,' in less than one-half did the disease progress, while in forty-one the patients were improved. Even out of twelve cases, originally diagnosed as 'far advanced,' one patient improved and all were made more comfortable, and, above all, were put in circumstances and given instructions which made them less likely to be foci of contagion to others. The average cost per patient for accomplishing this has been less than \$3.00 per week. This includes not only money used for the patient, but also that spent for the family."

Several lessons are taught by this work, the first of which is the urgent necessity of an early diagnosis by the family physician. If material improvement can be attained in 66 per cent. of the early cases in the relatively short time of twenty months, it is fair to presume that with a continuance of the régime a permanent cure will surely follow in over half of these cases. And this without working any financial hardship of consequence on the patient such as would be wrought by a change of residence into some distant part of the country. And then, too, there is to be considered not only the actual saving of this expense to the patient himself, but there is conserved for his dependent family that drain which would result from his more expensive maintenance away from home. But perhaps more important than all else is the opportunity presented for the dissemination of knowledge

concerning the care of the tuberculous, their proper isolation, the care of their sputum and excreta, the immense therapeutic value of sunshine and fresh air. Certainly if we are to attain the millenium in the conquest of the great scourge it must be through prophylaxis and this, in turn, can only come by educating the people. Teach them to court sunshine and fresh air and not to shun them, create in them a desire for temperate habits and plain, yet nutritious, food, and this, with a knowledge of the proper care for their sick, will surely win the battle. One of the most pernicious obstacles to be overcome is the firm belief, so deep rooted in the mind of the laity, that somewhere in the wilderness of nostrumdom there is surely a cure-all for the "dread disease," and the pursuit of this panacea so occupies the mind and the purse that the belated visit to the physician reveals too oft a well-advanced lesion—a lasting tribute to conscienceless newspaper advertising.

TO INCREASE PROPHYLAXIS.

With the advent of the summer months come the increased morbidity and mortality among the little folks from intestinal disorders, and the physician will do well to be on his guard for the early detection of any possible source of contamination of the food supply for infants and young children. Fortunately more and more is being accomplished in the larger cities of our state in procuring cleaner milk, for, after all, cow's milk must remain the mainstay of infant nutrition. In these days of comfort and convenience in the rural districts when the farmers have easy access to ice or cool running water, a little instruction as to cleanly milking and the after-care of the milk will do much in the way of prophylaxis in those communities.

Much more difficult is the solution of the problem among the poor in the larger towns and cities where living quarters are cramped and crowded and clean milk a luxury. From England comes the report of an interesting experiment in one of the poorer London quarters, St. Pancras, in the way of an effort to educate poor mothers in the feeding and rearing of children, an account of which appears in the London letter of the *Journal of the A. M. A.* for May 2, 1908. "A school has been established which has a big shop window filled with pictures of rickety children and an invitation displayed to passing mothers to come in and learn how to keep their babies from becoming bow-legged. A cookery

teacher from the London County Council attends and gives demonstrations in the preparation of cheap nutritious meals. An attempt is also made to get the father interested in the welfare of the mother and the child. Fathers are invited to the school, and after a cup of coffee and a pipe they receive 'talks' on hygiene. It is intended to open a milk depot for the use of mothers who can not suckle their babies. Prizes are given to the mothers who attend regularly and follow the advice given. The mothers pay a penny a fortnight for the classes and the weighing of their babies. It is claimed that the school has already done something to lessen the infant mortality of the district."

Doubtless much benefit would accrue from such a plan carried out in our own cities, for an opportunity would be afforded for the dissemination of considerable useful knowledge besides the question of proper food preparation. Such factors as proper ventilation both by night and by day, the adequate protection against flies by screens, bodily cleanliness, proper care of diapers and excreta, water supply and many other vital problems of hygiene could be impressed upon the poorer and more ignorant classes in a way that would do lasting good for generations to come. Some of the energy spent in foreign missions, landscape gardening and pink teas could bring better results by some such humanitarian effort as this and in the end our nation would be a stronger and better one for it, to say nothing of the immediate suffering and sadness that would be avoided. And the benefits would not be limited to the little ones alone, for with good hygienic surroundings and a proper knowledge of ways of attaining such, more adult sickness would surely be prevented with the resultant economic saving. In every city or town there are doubtless good medical men who would willingly give a portion of their time absolutely gratis for the promotion of this work. Can not a few philanthropic laymen be found in each city who will do as much?

PRESS CORRUPTION.

Probably there is no other country in the world whose appetite for the newspaper is greater than our own and in which more dependence is placed upon the public press for information concerning topics of general interest and importance. By the establishment of rural free delivery the intelligent farmer is enabled to be thoroughly conversant with the freshest data on the topics of the day and he has a right to expect such data to

be reasonably accurate. Likewise the day laborer contributes his share toward the maintenance of one or more of these instruments of enlightenment and education, and to him the subscription price of his paper often means no little sacrifice. His children are early allowed the privilege of reading the newspaper and oftentimes that may be their only source for recreative reading. Is it any more than fair, then, that the material published should be honest, truthful and uplifting in so far as it is possible to make it so? And is it not possible to fill the columns of our papers with good reading matter and legitimate advertising instead of "scoops" founded on what are known to be wild exaggerations and advertising of what are proven to be frauds of the rankest sort? We know that is possible and are grateful for the few organs that have taken the stand for honesty even at the expense of a few paltry dollars. The man who sells the columns of his paper to the charlatan, the quack and the nostrum dealer and knowingly gives space to fraudulent claims and guarantees is selling his soul for a mess of pottage and is just as guilty as is the fellow conspirator with the actual murderer.

THE FRENCH LICK SESSION.

INDIANA STATE MEDICAL ASSOCIATION.

THURSDAY AND FRIDAY, JUNE 18 AND 19.

For the second time within a few years the Indiana State Medical Association will hold its annual session at French Lick. The members of the Association who attended the last session held at this picturesque spot will recall that the place is an ideal one for society meetings as well as for quiet and comfortable rest and recuperation.

French Lick is situated in Orange County, on the Monon and Southern railways, 120 miles southwest of Indianapolis and about 60 miles from Evansville and New Albany. The country surrounding it is unusually picturesque, the high hills, fertile valleys, and wealth of foliage of its virgin forest, giving it a beauty not often seen in the middle West.

Much of the popularity of French Lick is due to the springs which have made the place one of the famous American health resorts. The fame of the spring antedates the arrival of the first white settler in the region, for, according to Indian legends, the waters were regarded by the red men from time immemorial as a sover-

eign remedy for most of the ills to which flesh is heir, and the springs was the mecca to which they carried their sick for hundreds of miles by many a winding trail through the primeval woods.

According to published histories and descriptions, the name French Lick is derived from two sources, one being the fact that many of the early settlers in the vicinity were of French birth or extraction, and the other the well-verified statement that almost down to a period within the memory of living men great herds of deer and buffalo were wont to come out of the forests to "lick" the salty waters of the springs.

soda, magnesia and lime, carbonate of magnesia and chlorid of soda. In addition to these salts, they also contain considerable quantities of two gases—carbonic acid and sulphuretted hydrogen.

The French Lick Springs Hotel, the largest and most pretentious hotel at French Lick, is modern and up-to-date in every particular and affords accommodations for 700 guests. The sleeping apartments are all outside rooms, and from the spacious veranda, which surrounds the entire building, and from nearly every window may be obtained pleasant views.

The recreation and amusement facilities at



During recent years the combination of picturesque scenery and pure, bracing air, with the medicinal virtues of the springs and the comforts and conveniences of a palatially equipped and well-conducted hotel, have drawn many thousands of tourists and health-seekers to French Lick.

There are three mineral springs at French Lick, named Pluto, Proserpine and Bowles, respectively, which contain largely the same elements, although varying in strength. All of these belong to the sulpho-saline-alkaline waters, the principal elements being the sulphates of

French Lick are varied. The clubhouse furnishes such attractions as billiards and bowling. Outdoor sports are provided for, including golf, tennis, baseball, trap shooting, horseback riding and driving. The golf course consists of nine holes over well-kept greens.

The park surrounding the hotel, covering in all an area of nearly 1,000 acres, and extending over hills and valleys, includes winding, shady paths where wild flowers grow in profusion and Nature lies undisturbed in primeval splendor.

Horseback riding has long been a favorite form of recreation at this resort, and there are



W. H. STEMM,
FIRST VICE PRESIDENT,
NORTH VERNON.



A. F. KNOEFEL,
SECOND VICE PRESIDENT,
LINTON.



DAVID C. PEYTON,
PRESIDENT,
JEFFERSONVILLE.



GEORGE R. GREEN,
THIRD VICE PRESIDENT,
MUNCIE.



F. C. HEATH,
SECRETARY,
INDIANAPOLIS.

few pleasures that equal that of wandering over trails through these beautiful woods along the course of some cool stream in its descent from the hill into the valley below. For those who prefer to travel by motor, the views from the summits of Orange County hills afford a beauty of landscape that is a never-ending delight. Indiana is well known by motorists for its good roads, and there is hardly a time when there are not a number of machines in the French Lick garage. They are not only from Chicago, Louisville, Cincinnati, St. Louis, and cities nearby, but from New York and the West. To glance over a page of the hotel register one is impressed with the wide extent of the reputation of this resort, for one sees the names of cities scattered from one coast to another, and here

lowed by a ball. Friday night there is to be a musicale, cake walk and dancing. While the meeting is fixed for but two days, all of the scientific work will be completed by Friday evening, and many will remain over Saturday, which will be given up to social features. These latter include a golf tournament for the members and their guests, a baseball game, motoring, driving and riding parties, with progressive euchre and bridge games in the evening.

Members intending to go to French Lick should write early for their hotel reservations, stating the kind of accommodations and rate desired, and the number in the party. The rates at the French Lick Springs Hotel are from \$3.00 to \$6.00 per day, on the American plan, but accommodations may be had at other



and there the name of a visitor from South America, Europe or Australia.

The Committee on Arrangements, consisting of Drs. Geo. D. Kahlo, chairman, J. R. Yung and Albert E. Sterne, have made ample provision for the care and entertainment of the Indiana State Medical Association.

The amusements provided for the members and their friends are quite varied. During the hours of the scientific session the ladies will be entertained by trips to Mt. Aric, Cross' Cave and there will be music and light refreshments; driving, riding and motoring parties will wander in all directions.

The entertainment for the first evening will be the President's address, the reception, fol-

lowed by a ball. Friday night there is to be a musicale, cake walk and dancing. While the meeting is fixed for but two days, all of the scientific work will be completed by Friday evening, and many will remain over Saturday, which will be given up to social features. These latter include a golf tournament for the members and their guests, a baseball game, motoring, driving and riding parties, with progressive euchre and bridge games in the evening.

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hotels in French Lick at rates varying from \$1.00 to \$2.00 per day. Among these may be named the Wells Hotel, \$1.50 to \$2.00 per day; Indiana Hotel, \$1.25 to \$2.00 per day; Tolliver Hotel, \$1.00 to \$1.50 per day, and Claxton Hotel, \$1.00 per day, all of these on the American plan. Dr. Geo. D. Kahlo, the Chairman of the Committee on Arrangements, authorizes us to say that he will be glad to personally attend to reservations for members upon request. The hotels are all located within a short distance of the Monon and Southern station, and busses meet every train. Members of the Orange County Medical Society have been designated to meet the trains and to direct members and their friends to their hotels.

All of the meetings will be held in the Casino Building on the grounds of the French Lick Hotel Company. The general meetings will be held in the west room, and this room will also be devoted to the meetings of the Section on Medicine. The Section on Surgery will meet in the east room of the Casino Building, and this room will also be used for the meetings of the House of Delegates, where all the business of the Association is transacted.

The society will be welcomed to French Lick by Hon. Thomas Taggart. The principal guest of the Association will be Dr. James M. Anders, of Philadelphia, who will deliver an address on

p. m. and 9:10 p. m., and Louisville at 10:35 a. m. and 5:50 p. m. Trains depart from French Lick over the Monon for Indianapolis at 5:45 a. m. and 8:55 a. m.; Lafayette at 5:45 a. m.; Cincinnati and Indianapolis at 7:00 a. m.; Louisville at 7:00 a. m. and 3:40 p. m.; Chicago at 8:55 a. m. and 9:15 p. m., and St. Louis at 11 a. m. and 9:15 p. m. Trains arrive at French Lick over the Southern Railway at 4:50 p. m. and 10:20 a. m. from St. Louis and leave French Lick for St. Louis at 11:35 a. m. and 6:45 p. m.; from Evansville at 10:20 a. m. and 4:50 p. m., and leave French Lick for Evansville at 11:35 a. m. and 6:45 p. m.



Friday morning, June 19, his subject being "Intestinal Autointoxication and Its Treatment."

French Lick may be reached by direct trains from Indianapolis and Evansville, with close connections for almost all points in the state. There is a movement on foot to have a special train leaving Indianapolis in the afternoon of June 17, arriving at French Lick about 9:00 the same evening, although no definite arrangements have yet been announced. Trains arrive at French Lick over the Monon from Chicago at 6:40 a. m., 5:50 p. m. and 9:10 p. m.; from St. Louis at 8:50 a. m. and 5:50 p. m.; from Cincinnati at 1:10 p. m.; Indianapolis at 5:50

OUR PRESIDENT.

David C. Peyton, President of the Indiana State Medical Association, was born on a farm in Clark County, Indiana, Oct. 12, 1860. He was educated in the common schools of the county and afterward had three years of normal school training. He taught in the public schools of Clark County for a short time. He remained on the farm, becoming familiar with all of its work, until he was about 22 years of age. He received his medical education, the first year, in the Ohio Medical College, at Cincinnati, and afterward graduated at the University of Louis-

ville in 1886, and has continued to practice his profession at Jeffersonville ever since. He graduated at the Medico-Chirurgical College at Philadelphia in the winter of '98 and '99. He was commissioned a major general and brigade surgeon in the Spanish-American War by the late lamented President McKinley, and after seeing service in the field he was detailed as chief medical officer of the State of Pennsylvania, and was stationed in Philadelphia in charge of sick soldiers in all the hospitals of the state. He is a member of the Clark County Medical Association, Indiana State Medical Association, American Medical Association, and Association

practice of his profession and his genial manner has won for him a great many friends all over the state.

THE PROGRAM.

THURSDAY, JUNE 18.

MORNING SESSION, 9 A. M.

Medical Section.

1. A Few Important Points in Regard to Nervous and Mental Diseases...Chas. F. Neu, Indianapolis
Discussion opened by G. W. McCaskey, Ft. Wayne, and E. C. Reyer, Indianapolis.
2. Myocarditis from a Purely Pathological Standpoint.....R. H. Ritter, Indianapolis
3. Myocardial Failure from Other Causes Than Valve Lesions....A. C. Kimberlin, Indianapolis
4. The Relationship of Heart and Kidney Affections.....Robert Hessler, Logansport
Discussion opened by J. B. Berteling, South Bend; F. B. Wynn, Indianapolis, and Walker Schell, Terre Haute.
5. Diabetes, Diagnosis, Treatment and Report of a Case.....L. L. Mobley, Summitville
6. The Treatment of Diabetes...G. D. Kahlo, French Lick
Discussion opened by Allison Maxwell, Indianapolis, and George T. McCoy, Columbus.

Surgical Section.

1. Strangulated Hernia, the Importance of Its Early Recognition and Necessity of Its Radical Treatment...T. B. Eastman, Indianapolis
Discussion opened by A. M. Hayden, Evansville, and I. N. Trent, Muncie.
2. The Uterus an Abdominal and Pelvic Tumor.....H. A. Duemling, Ft. Wayne
3. The Diagnosis and Treatment of Fluctuating Tumors of the Female Pelvis.....G. H. Grant, Richmond
Discussion opened by M. F. Porter, Ft. Wayne, and L. J. Willien, Terre Haute.
4. The Puerperal Perineum—Protection and Repair.....M. I. Rosenthal, Ft. Wayne
Discussion opened by J. O. Sexton, Rushville, and H. C. Pantzer, Indianapolis.
5. The Technic of Harelip and Cleft Palate Operations.....J. R. Eastman, Indianapolis
Discussion opened by J. H. Oliver, Indianapolis.
6. Excesses in Surgical Cleanliness.....M. A. Austin, Anderson
Discussion opened by Edwin Walker, Evansville, and H. O. Pantzer, Indianapolis.

AFTERNOON SESSION, 2 TO 5.

Medical Section.

1. Disposal of Sewage in Small TownsG. B. Lake, Wolcottville
2. Epidemiology of Typhoid Fever.....H. O. Bruggeman, Ft. Wayne
3. Report of Committee on State Medicine.....J. N. Hurty, Indianapolis
Discussion opened by F. A. Tucker, Noblesville.
4. Tuberculin Therapy...W. T. S. Dodds, Indianapolis.
5. The Early Clinical Diagnosis of Pulmonary Tuberculosis.....T. Victor Keene, Indianapolis
6. Report of Committee on Tuberculosis.....J. A. Little, Logansport
Discussion opened by Theo. Potter, Indianapolis, and J. C. Blossom, Mt. Summit.



of Military Surgeons of the U. S. Army. He was a member of the first House of Delegates of the American Medical Association. He is chief surgeon of the Louisville and Southern Indiana Traction Company, the Louisville and Northern Lighting and Railroad Company; surgeon of the American Car and Foundry Company, of the B. & O. S. W. Railroad, and of the Big Four Railroad, as well as examiner for many insurance companies. He was married to Miss Henrietta S. Hay, of Charlestown, Ind., June 26, 1883. He has been successful in the

Surgical Section.

1. Scoliosis.....David Ross, Indianapolis
Discussion opened by H. R. Allen, Indianapolis, and
C. A. Daugherty, South Bend.
2. The Diagnosis and Treatment of Sinus Throm-
bosis.....J. F. Barnhill, Indianapolis
Discussion opened by L. F. Page, Indianapolis, and
G. W. Spohn, Elkhart.
3. Obstruction of the Bowels...E. D. Clark, Indianapolis
4. Obstruction of the Bowels from Traumatism...
.....J. H. Ford, Indianapolis
Discussion opened by T. B. Noble, Indianapolis, and
T. C. Kennedy, Shelbyville.
5. Gonorrheal Ophthalmia...W. N. Sharp, Indianapolis
Discussion opened by D. W. Stevenson, Richmond,
and A. P. Roope, Columbus.
6. Dermoid Cysts.....H. G. Nierman, Ft. Wayne
Discussion opened by Moses Thorner, Indianapolis.

EVENING SESSION, 8 P. M.

President's Address—"The Physician As a Citi-
zen".....David C. Peyton, Jeffersonville

FRIDAY, JUNE 19.

GENERAL SESSION, 9 A. M.

Address—"Intestinal Autointoxication and Its
Treatment".....J. M. Anders, Philadelphia

Medical Section, 10 to 12.

1. Relation of Physicians and Druggists.....
.....S. E. Earp and J. R. Francis, Indianapolis
2. A Plea for the Use of Pharmacopeal and Na-
tional Formulatory Preparations.....
.....Frank H. Carter, Indianapolis
Discussion opened by Joseph T. Stokes and H. E.
Zimmer, Indianapolis.
3. A Plea for State Control of Inebriety and Drug
Addictions.....A. L. Wilson, Indianapolis
4. Report of the Committee on Inebriety.....
.....H. J. Hall, Franklin
Discussion opened by A. E. Sterne, Indianapolis, and
George R. Green, Muncie.
5. Atypical Pneumonia...Chas. R. Sowder, Indianapolis
Discussion opened by W. C. McFadden, Shelbyville,
and B. S. Hunt, Winchester.

Surgical Section.

1. Raynaud's Disease.....John Kolmer, Indianapolis
Discussion opened by Allen Pierson, Spencer, and
C. K. Bruner, Greenfield.
2. Symposium on Obstetrics —
(a)—Normal Labor....Jane Ketcham, Indianapolis
(b)—Toxæmias of Pregnancy.....
.....L. Burekhardt, Indianapolis
(c)—Puerperal Infection
.....G. B. Jackson, Indianapolis
(d)—Six Hundred Cases of Labor in Private
Practice.....H. A. Cowing, Muncie
Discussion opened by E. F. Hodges, Indianapolis;
S. J. Young, Valparaiso, and E. E. Padgett, In-
dianapolis.

AFTERNOON SESSION, 2 TO 5.

Medical Section.

1. Ocular Manifestations in General Diseases....
.....W. F. Hughes, Indianapolis
Discussion opened by George Knapp, Vincennes, and
L. D. Brose, Evansville.
2. Etiology of Rheumatism and Chorea.....
.....W. D. Hoskins, Indianapolis
3. Acute Rheumatism in Children.....
.....L. P. Drayer, Ft. Wayne

Discussion opened by A. S. Jaeger, Indianapolis, and
H. A. Fox, Gosport.

4. Tuberculin Therapy...W. T. S. Dodds, Indianapolis
garris and Acne Rosacea...A. M. Cole, Indianapolis
Discussion opened by C. S. Bond, Richmond, and
F. R. Charlton, Indianapolis.
5. The Present Status of Syphilis.....
.....A. W. Brayton, Indianapolis
Discussion opened by W. H. Gilbert, Evansville;
Goethe Link, and W. P. Garshweiler, Indianapolis.
6. Acute Nephritis.....R. E. Holder, Columbus
Discussion opened by C. A. White, Danville, and
W. W. Tucker, Greencastle.

Surgical Section.

1. Exophthalmic Goitre—
(a)—Etiology and Pathology.....
.....J. A. McDonald, Indianapolis
(b)—Symptoms and Medical Treatment.....
.....F. O. Dorsey, Indianapolis
(c)—Surgical Treatment...J. V. Reed, Indianapolis
Discussion opened by B. D. Myers, Bloomington,
and C. E. Cottingham, Indianapolis.
 2. Some Considerations of Intra-Sigmoid Disease.
.....G. W. Combs, Indianapolis
Discussion opened by A. P. Buchman, Ft. Wayne,
and A. B. Graham, Indianapolis.
 3. Anesthesia Considered As a Specialty.....
.....C. N. Combs, Terre Haute
 4. A Consideration of General Anesthetics.....
.....W. R. Davidson, Evansville
 5. Concerning Hyoscin, Morphin, Cactin Anesthe-
siaT. M. Jones, Anderson
Discussion opened by Ben Perley Weaver, Ft.
Wayne; J. B. Fattie, Anderson, and H. S. Thurs-
ton, Indianapolis.
- Pathology of the Seminal Vesicles and Prostate,
with Suggestion of the Necessity for Sur-
gical Treatment...Charles E. Barnett, Ft. Wayne
Discussion opened by W. N. Wishard, Indianapolis.

EDITORIAL NOTES

WE wonder if Pluto is good for spring fever!

REMEMBER the place—French Lick.

Remember the dates—Thursday and Friday,
June 18 and 19.

INDIANA doctors turned out in force to at-
tend the A. M. A. session at Chicago. But then
Indiana always does things well.

FRENCH LICK is one of the most charming
spots in Indiana. No more delightful place
could be selected for the annual session of the
Indiana State Medical Association. The mem-
bers will find it an ideal place for rest and re-
cuperation.

Do not forget that your wife will enjoy a few
days at French Lick, and she probably needs a

rest and change as well as you. Take her with you to the annual session of the Association. The Committee on Arrangements has provided a series of entertainments for her.

READ the advertising pages of *THE JOURNAL* and then make it a point to patronize the advertisers whenever you can consistently do so. An occasional letter to the advertisers, saying that you are patronizing them and that you appreciate the fact that they are advertising in *THE JOURNAL*, will go a long way toward making them feel that their money spent with us is bringing returns. This means something to you in the way of securing a larger and better journal.

FORT WAYNE is building a much-needed eight-story fireproof hotel at an estimated cost of three-quarters of a million dollars. It will be opened for business on Jan. 1, 1909. The Fort Wayne Medical Society has been waiting for the erection of a new hotel, thus affording ample accommodations for all visitors, before inviting the Indiana State Medical Association to hold another session at Fort Wayne. Now that a new and commodious hotel is in course of erection, the long-delayed invitation will be extended.

THE Anchor Life Insurance Company of Indianapolis pays \$5 for life insurance examinations. Indiana doctors should remember this when grieving because this state is the home of so many "cheap skate" life insurance companies. And the Anchor Life Insurance Company finds that it is economy to pay a respectable fee for examinations, as it means better examiners and better service. We take pleasure in publishing in this number a letter from the company correcting us in the impression that no Indiana company pays a \$5.00 fee.

WE met a doctor recently who was badly marked as a result of a siege of smallpox. He told us he was once a rabid anti-vaccinationist and while in that state of mind he contracted the disease which disfigured him for life. Ten other people were exposed to the disease the same time he was, but, all having been vaccinated, not one of them contracted the disease. The doctor now believes in vaccination.

What a pity that such a lesson should be required to prove the efficacy of a measure that has long since established its value and is recognized by scientific men all over the world.

DR. J. M. ANDERS, of Philadelphia, is to be the honored guest of the Indiana State Medical Association at the French Lick meeting. He will deliver an address upon the subject "Intestinal Autointoxication and Its Treatment." This address will be a scientific contribution of decided merit, as Dr. Anders is a man of extended experience, recognized ability, and one of the leading medical investigators of this country. Aside from the purely scientific aspect of the subject, the practical side will appeal to every physician, and the members of the State Association are to be congratulated upon having secured such an able man to present the subject to them.

THE membership of the Indiana State Medical Association is now the largest in the history of the Association. Many new members have been secured by the A. M. A. canvassers, but *THE JOURNAL* is largely responsible, both directly and indirectly, for much of the increase. Without *THE JOURNAL* the A. M. A. canvassers would not have been put to work in Indiana. Hundreds of letters, accompanied by sample copies of *THE JOURNAL*, have been sent to doctors eligible to membership in county societies, and these, followed up by the personal interviews of canvassers, have been the means of bringing many doctors into medical societies. The work will be continued, and it is not too much to expect an increase of several hundred in our membership before the close of the year.

It is greatly to be regretted that the medical profession of America was not allowed more of an opportunity to show its appreciation of the distinguished Dr. Robert Koch upon the occasion of his visit to American soil. And how happy we would have been had he found himself able to remain over with us for the Chicago meeting! Yet if he can get in our land the rest he seeks from the arduous labors he has been performing, then by all means let us respect that desire to the letter. He is surely aware that no profession is more grateful than this of ours for the glorious work that this brave man has done and the sacrifice he has made to science, a sacrifice that doubtless to him would have been only a joy even though his government had not granted him his honorarium. The world needs all the Robert Kochs it can get, so let us keep him as long as possible.

THE action of the corporation counsel for New York in warning the Board of Health

against licensing osteopaths or receiving death certificates signed by them is most commendable. The man who is willing to ascribe all human suffering to some bony or ligamentous abnormality, usually a so-called "displacement," is about as competent to conduct a careful autopsy and make a report of its pathologic findings as the average American Indian would be to interpret the music of Lohengrin. When the training of the osteopath includes a diploma from a reputable medical college, supplemented by osteopathic specializing, then the matter will assume a different aspect, but until such an ideal is attained then osteopathy should rest content to occupy a similar place with Christian Science and the other fads, viz.: to limit itself to certain selected instances, where its indications are plain.

AFTER two years of wrangling as to the expediency of discontinuing the "Transactions," the Indiana State Medical Association has shown its wisdom in launching on the sea of state medical journalism one of the cleanest and most handsome crafts that monthly floats into our harbor. Dr. Albert E. Bulson, Jr., is the editor, and his foreword as to the policy the Council will pursue in the matter of advertisements accepted for publication, and the work he hopes to accomplish for organized medicine, presages a great influence and usefulness for the journal. With the united and enthusiastic support of the membership of the association, the ideals set for it by those who have so long advocated its publication will be quickly realized. THE JOURNAL is so much like us we are justified in claiming it as our twin sister, and just know that we will grow to be very fond of it as times passes on.—*Journal of the Arkansas Medical Society*.

THE medical profession of the State of Maryland is to be congratulated upon having a Senate that is sufficiently wide awake to realize the dangers of allowing Christian Scientists and faith healers to practice within the state unless they be equipped with a diploma of a regular physician. And yet it is highly probable that this commendable measure was not enacted without some considerable activity on the part of the profession itself, without which little can be expected in the way of medical legislation.

This regulation will be of both direct and indirect benefit to the public. In the first place it will materially deplete the ranks of these fakers in the state, because very few, if any, will be able to qualify, and, secondly, by virtue of the

broader education necessary to give them their medical degree fewer of these semi-religious grafters will be created. May the day be not far distant when like restrictions will be inaugurated in all the states!

AGAIN we wish to ask a more careful revision of the copy sent us by county secretaries. It is gratifying to note that our request for typewritten copy is being complied with more generally, but the mere fact that a typewriter is being used without regard to the inexperience of the operator does not remedy the difficulty to any great extent. Misspelled words, poor punctuation or entire lack of it, incomplete sentences, all make for a consumption of time in the abstracting of papers and reports that absolutely precludes our giving to you all that we could if only we had your cooperation in the matter. This comment is not offered in any spirit of complaint, for conditions are improving and we are encouraged, but more as an appeal to you to aid us in making our journal all that it is capable of being made.

Our publishers have complimented us highly on the quality of copy submitted to them and we are only laboring in the effort to make our material worthy the praise they have given it.

WITH an outline of the program of the state meeting printed so long in advance as it was in the May number, every one ought to go to French Lick prepared to add something of interest to the discussion of the papers presented. There is nothing that adds more to the life and interest of a medical meeting than free and high-grade discussion. It is not absolutely essential that one have had a unique personal experience in the subject at hand in order to present an interesting and helpful discussion, if only one make himself thoroughly familiar with the work of those of larger experience in the line under discussion and then go prepared to think and draw conclusions for himself. Better far to have a few good papers well and freely discussed than a multitude reeled off to a silent audience. Besides, it is unfair to a man who, after much study and work along certain lines, condenses his results and presents them in a conscientious fashion, to allow his efforts to fall as though to a row of empty chairs. Go to French Lick and go loaded to give at least one subject a rousing, good discussion that will help make the meeting a red-letter one!

It is more than probable that New York State will soon have a law requiring the registration of every case of tuberculosis, for such a bill has been passed by the legislature and sent to the governor for his approval and signature. Such a law should carry with it rigid regulations concerning the sputum, stools, etc., and attaching a penalty upon family or attendant for failure to carry out such regulations. Recently we heard of a tuberculous patient who, while confined to his bed, amused himself by seeing how far up the wall he could eject his sputum. That such a practice could be tolerated in a civilized community seems almost beyond human comprehension, and the public should certainly be safeguarded from such an irresponsible person. Perhaps a certain amount of allowance should be made for ignorance in this particular instance, but even ignorance is no excuse for depravity. With the public instructed as it should be concerning the dissemination of tuberculous infection, properly reinforced by state laws rigidly carried out in each case of such infection, there might be added hope of ultimately conquering this lurking scourge.

PROBABLY a majority of the members of the Indiana State Medical Association have never stopped to consider what it costs to publish a first-class medical journal, and that it requires a good deal of hustling and executive ability to raise the necessary funds to make both ends meet. We, therefore, think it entirely proper to say that every doctor who pays one dollar in dues to the Association, which dues includes a subscription to *THE JOURNAL*, receives *THE JOURNAL*, which actually costs nearly twice as much. Of course, a large part of the expense of publication is met by the income from advertising, and without this income *THE JOURNAL* would be a small and comparatively insignificant periodical. Members of the Association should bear this in mind when we plead for the support of the advertising pages, for it means much for the success of *THE JOURNAL*. Please remember also that out of about twenty state association journals there are only three that have clean advertising pages, and *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION* is the only state association journal existing at the present time which from the initial number started out with clean advertising pages. To start right required the rejection of over \$3,000 worth of advertising such as is regularly accepted by some of the prominent medical journals of the country, but we were determined to

publish a journal of which we could be proud and the advertising pages of which the Indiana doctors would not have to blush for with shame. The results tell the story. We are now publishing a journal larger than at first thought possible for us to have, and because it is clean it has won the appreciation of our members as well as others who receive copies through exchanges and otherwise. It is published for Indiana medical men and in their interests, and it is not dependent upon nostrum and other objectionable advertising for its support. Its advertising is above criticism and will remain so.

But a word as to the support of *THE JOURNAL*. We have pointed out that advertising enables us to publish a larger and better journal than would otherwise be possible, and every member of the Association is interested in having a good journal. We can only secure and hold advertising by proving to the advertiser that we actually make the advertising pay for him. It is actual returns which he wants and it is a cold business proposition to him and no sentiment when he considers the advisability of paying money for advertising in *THE JOURNAL*. Now the members of the Association can, by patronizing the advertisers, make the advertising pay the advertiser and at the same time help *THE JOURNAL*. This can be done by no unfair discrimination, but, all things being equal, showing preference for those firms who patronize us. For instance, there is no excuse for any member of the Association, if he buys his surgical instruments of a firm that contributes nothing to our support when there are five or six equally as reliable firms that patronize us and add to the benefits which go to every member of the Association. The same thing holds true in the purchase or use of anything required by the physician in his regular work. Reciprocity is considered fair in the conduct of any business, and there is no reason why medical men should not follow good business policy as well as any other class of people. We are not asking you to adopt any measures which smack of a labor union boycott, but we are asking you to show advertisers that it pays to advertise in *THE JOURNAL* which you own and the success of which means so much to you. *THE JOURNAL* not only deserves your support, but it needs it if the greatest good is to come from the publication of a periodical which owes its existence to your needs and is published solely in your interest.

CORRESPONDENCE

INDIANA LIFE INSURANCE COMPANY PAYS \$5.00 FOR MEDICAL EXAM- INATION.

INDIANAPOLIS, May 7, 1908.

To the Editor:—In your esteemed *JOURNAL* for the month of April I note, among other matters of interest, that you find occasion to speak in two instances with reference to life insurance, giving in connection with one of these instances a list of companies paying a flat fee of \$5.00 to their examiners for each report made by them.

I also note that you state, so far as you know, no Indiana company is paying such a fee. I respectfully beg permission to herewith inform you that The Anchor Life Insurance Company of Indianapolis, Ind., is not only paying a \$5.00 fee at present, but has been doing so since the day it began doing business.

Hoping that other life insurance companies may find it advisable to pay a like fee, I am

Yours very truly,

THE ANCHOR LIFE INSURANCE CO.,

W. B. KITCHEN, Medical Director.

(We take pleasure in publishing the above letter. It is comforting for us to know that at least one life insurance company claiming Indiana as its home has the good business judgment to pay a respectable fee for medical examinations and by so doing is able always to secure examiners from the better class of physicians. By paying adequate fees the Anchor Life Insurance Company can discriminate in the appointment of examiners and invariably secure competent services. Better examiners and more skill in examinations means better risks, and better risks means a saving to the company and cheaper rates for the policy holders. Therefore, it is economy all along the line, and the Anchor Life Insurance Company is to be congratulated upon having considered the matter in such light.—Ed.)

CONCERNING MEDICAL LEGISLATION.

FORT WAYNE, May 15, 1908.

To the Editor:—When the Indiana State Medical Association meets, it should devote some time to medical legislation, remembering that it is not by counties nor by Congress that health laws are enacted, but by state legislatures.

An amendment of law is required in regard to notifications of births, deaths and infectious diseases. The whole onus is now placed on physi-

cians, contrary to the practice in England, Germany, and other countries. The notification is for the benefit of the people, and they should be made jointly responsible with the doctors in making it. If there were a fine for the head of the household in case of neglect, as well as for the doctor, there would not be so many instances where contagious diseases are disseminated by neglect of medical care for fear of the quarantine law.

Another amendment is suggested relating to boards of health. All licensed practitioners in a county or city should be members of the county or city board, respectively. These should elect an executive committee of health for their district, and probably should name the secretary, who is the paid managing official. In this way only can the board, as you suggest, be divorced from politics. No lay authority could so well know who is best fitted for membership on the executive committee as are the members of the profession. And this plan would have the further advantage of securing a hearty cooperation between all the practitioners and the secretary of the board in each county or city.

WM. P. WHERRY.

PERSONALS

DR. J. S. COVERDALE, of Decatur, who took a trip South for his health, has returned home much benefited.

DR. C. W. CAMPBELL, of Hammond, who spent the winter in Florida, has returned home and resumed his practice.

DR. W. F. WOOD, of Mishawaka, is compelled to give up practice on account of ill health. He intends to spend a year in Mexico.

DRS. HERMAN and OSCAR RIECE, who for the past year have been practicing medicine in the Standard District of Hammond, have discontinued their practice in Hammond.

DR. CALVIN CARTER, of Brookville, who has been ill for several months, is much improved, and, while not yet able to attend to his entire practice, is devoting much of his time to it.

DR. G. W. H. KEMPER, of Muncie, counselor of the Eighth District, was elected commander of the Indiana Commandery, Loyal Legion, at a recent reunion of that order.

DURING the latter part of the month of April Dr. Addison, representing the American Medical Association, secured eight applications for membership in the St. Joseph County Medical Society.

DR. A. J. WILLITS, for a number of years a practitioner at Lowell, but who for the past year has been practicing in Hammond, has moved to Chicago, where he has opened up an office on the South Side.

THE following named physicians who paid their medical society dues for the year 1907 were erroneously placed in the column of suspended members in the Transactions of 1907: Dr. B. F. Snyder, Camden, Carroll County, and Dr. C. W. Burket, Warsaw, Koseinsko County.

DR. J. I. MARIS, of Paoli, formerly secretary of the Orange County Medical Society, has recently bought out Dr. Shewman's practice at Waymansville, and Dr. S. F. Teaford, of Paoli, has been elected secretary of Orange County Medical Society to fill the unexpired term of Dr. Maris.

DR. W. P. McMILLEN, of Deatur, had a narrow escape from drowning while on his way to see a patient near Berne Wednesday night, May 6. The night was dark, and when about three miles north of Berne the horse stepped off a bridge into a flooded creek. The buggy followed, and Dr. McMillen was thrown headlong into the stream. By grasping the floating buggy he was able to keep from drowning and finally crawled up the embankment to the road. In due time the horse was rescued, and the Doctor proceeded on his way to the house of his patient, returning home later in a prostrate condition. As a consequence of the accident Dr. McMillen contracted a severe cold and was confined to his bed for several days.

NEWS, NOTES AND COMMENTS

MRS. ELIZABETH WOOD, wife of Dr. Theodore F. Wood, died at her home in Angola, May 5, 1908, aged 66 years.

PLANS have been received for a custodial building to be erected for the Indiana Village of Epileptics, New Castle, during the coming summer. The new building will cost about \$20,000, will be a brick structure, two stories high, and will accommodate 25 patients.

THE graduating exercises of the Indiana University School of Medicine, now the combined medical schools that formerly constituted the medical departments of both the Indiana and Purdue universities, were held at Bloomington, Ind., May 20, 1908, a large class receiving the degrees. Dr. W. N. Wishard, of Indianapolis, delivered the address on behalf of the medical department, and President Bryan delivered the address on behalf of the Trustees of the university.

ON looking over the program for the meeting of the A. M. A. at Chicago, we find that Indiana was well represented. Aside from the fact that Dr. Edwin Walker, of Evansville, is vice-president, Dr. Miles F. Porter, of Fort Wayne, one of the trustees, and Dr. Albert E. Bulson, Jr., of Fort Wayne, secretary of the Section on Ophthalmology, the following gentlemen were on programs of sections for the reading of papers:

Drs. George W. McCaskey, Fort Wayne; Miles F. Porter, Fort Wayne; Thomas B. Eastman, Indianapolis; H. C. Parker, Indianapolis; F. C. Heath, Indianapolis; L. D. Brose, Evansville; L. F. Page, Indianapolis, and J. N. Hurty, Indianapolis.

THE Northern Tri-State Medical Association will hold its summer meeting at the Oliver Hotel, South Bend, Ind., July 14. The officers of the Association are: President, Dr. Albert E. Bulson, Jr., Fort Wayne, Ind.; vice-president, Dr. William A. Diekey, Toledo, Ohio; secretary, Dr. William F. Shoemaker, Butler, Ind.; treasurer, Dr. J. A. Weitz, Montpelier, Ohio.

The program for the South Bend meeting includes a large number of very interesting subjects by prominent members of the Association. Dr. Casey A. Wood, of Chicago, is to be the guest of honor and will deliver the principal address, his subject being "The Present Status of Some Ophthalmic Means of General Diagnosis." The members of the Association will be tendered a banquet at the Oliver Hotel by the St. Joseph County Medical Society.

SOCIETY PROCEEDINGS

ADAMS COUNTY.

The Adams County Medical Society met at the office of Dr. Kellar of Decatur on April 10. The members were so occupied with the discussion of local affairs of interest to the society that the time passed by unnoticed, and as Dr. W. W. P. McMillen, who was to have presented the paper of the evening, was ill with lagrippe, it was decided to postpone the program until the May meeting. Dr. J. S. Boyers was elected delegate to the State Association meeting to be held in June at French Lick.

Adjourned.

MARIE L. HOLLOWAY, *Sec.*

ALLEN COUNTY.

Fort Wayne Medical Society, meeting of April 14, 1908.

Society met in regular session at Hope Hospital. Meeting called to order by President Calvin, with 32 members present. The program being a clinical one, was in charge of Drs. Porter, Gilpin and Havice.

Tuberculosis of Bladder and Kidneys.—Case report and patient exhibited by Dr. J. H. Gilpin. Patient, male, aged 27, clerk, American. Family history negative except that one brother now has tuberculosis contracted in Denver. Patient has had all of the diseases of childhood. As long as he can remember he has had to get up in the night four or five times to urinate. About six years ago he began to suffer from frequent urination and smarting, and a bearing-down sensation after urination. He thinks there was blood at times. Has never had any gravel or gonorrhea. He urinates about every hour; urine dribbles at times. He has no pain in the bladder region, but at times in the back. Five years ago left testicle swelled to size of fist and was removed surgically. In the past six months he has suffered greatly with pain over pubes, and frequent urination and pain in the back. When patient feels very bad he passes some blood in the urine. In December, 1907, he passed blood constantly for about a week. He has lost about 15 pounds in the past six months. The condition is exaggerated on exertion. Urine at times is milky as soon as passed. The pain has never been colicky but is a constant ache, and worse after a night's rest. Patient has night sweats, afternoon temperature and reacts to tuberculin.

Erysipelas.—Case report and exhibition of patient by Dr. Gilpin. Patient infant eight months old. The erysipelatosus inflammation began on the vulva and extended until the entire body was involved. The treatment followed was supportive and symptomatic. A few weeks ago the baby developed abscesses, first in the scalp, which were opened and drained. Later two abscesses in the pharynx broke. This is evidently a pyemic condition. The temperature ranged from 101 to 104½. This case illustrates that erysipelas is a self limited disease.

Mongolian Idiot.—Case report and patient exhibited by Dr. Gilpin. Patient baby ten months old. This baby is the second child of healthy parents. At three months of age it was thought to have colic, as it rolled its eyes and cried out. The eyes are of the Mongolian type. The child is somnolent and apathetic. It apparently neither sees nor hears. It takes nourish-

ment regularly and seems to thrive. There are four conditions to consider in this case, namely: (1) Is it a Mongolian idiot? Or is the condition due to (2) myxedema, (3) rickets or (4) blindness. The baby was placed on thyroids and improved for a time, but as the dose was increased the condition became worse. It lies very listless but notices the rattle of a bell or whistle. Child will not sit up alone. There is no edema. Child thought to be a Mongolian idiot.

In opening the discussion, Dr. McCaskey said, in discussing the kidney case, that he does not believe there is any question but that germs do pass from bladder to kidneys. They travel up the mucosa.

Dr. Wheelock, in discussing the last report, said that ophthalmoscopic examination is very unsatisfactory, but there is an optic atrophy present. This, however, would hardly explain the listlessness and somnolence.

Dr. B. Van Sweringen, discussing last case report, was of the opinion that the condition is a congenital affair that involves the sight and hearing. This accounts for listlessness and lack of mental development. The child has grown too much to be a case of myxedema. The spasms indicate an involvement of brain tissue. The case of erysipelas is interesting as showing the amount of resistance the baby had.

Dr. Porter, on the infection of the kidney from the bladder, said that infections of this sort are common. An ascending infection is what kills men who have hypertrophy of the prostate. Catheter treatment results, in about 77 per cent. of cases, in infection, and they die in about four or five years after beginning catheter life.

Dr. Bulson, in discussing the last case, said that he had made an examination of the infant's eyes and that there is a pupillary reaction in both eyes, which indicates that there is not a total atrophy.

Dr. Drayer, in reference to the case of tuberculosis, said that organisms of the non-motile type do not ascend. Referring to the second case he said that the mortality in general erysipelas occurring at birth or during birth period is high; 95 per cent. of these cases die, 50 per cent. in the first year. They die of inanition after they recover from the erysipelas. Another queer fact about this case is that abscesses are sterile. Patient had no fever. With reference to the third case he said that this child is not an ordinary idiot. It is one of those borderline cases, and he believes that organotherapy should be relied on for diagnosis.

Dr. Van Buskirk, discussing the last case, suggests that there may be a congenital lack of blood supply to a portion of the brain.

The discussion was closed by Dr. Gilpin.

Detachment of Retina.—Case report and patient exhibited by Dr. Havice. Patient 14 years of age. He was first seen one month ago, at which time he had failing vision in the left eye. The left eye had been injured a couple of times. Dr. Havice gave a short talk on detachment of the retina.

Ulceration of the Cornea.—Case report and patient exhibited by Dr. Havice. Patient, a man, was injured five days ago by being struck in the eye with a piece of metal which was removed and eye bandaged. Dr. Havice was consulted the next day, the eye being swelled and causing the patient much pain. At the point of injury there was an ulceration. Dr. Havice said that all ulcers of the cornea are caused by infection. As exciting causes, trauma stands first. As treatment for ulcers of the cornea Dr. Havice gave the

following: For simple cases, cleansing, atropin and rest. When the patient has a foul, ragged ulcer, mop out the ulcer and apply pure carbolic acid by means of a wisp of cotton on a probe. If this does no good, repeat, and if this also fails, use actual cautery. Later teaching is not to open the anterior chamber in case of hypopion on account of danger of infection. Prognosis depends on location, extent and depth of the ulcer.

In opening the discussion Dr. Bulson said that the detachment of the retina in the case presented by Dr. Havice is of traumatic origin. These cases frequently have traumatic cataract, and all are apt to terminate in degenerative changes and inflammatory affections of uveal tract requiring removal of eye. He advises rest and posterior sclerotomy if seen early, but when seen late no treatment is helpful.

Dr. Wheelock said that caution should be used in the use of atropin, as tension is increased by atropin, and circulation is interfered with, and therefore drainage is disturbed. He has had the best results with canterization with pure crystals of carbolic acid.

Cancer of Uterus.—Case report and patient exhibited by Dr. Porter. Patient, female, aged 61 years. She passed menopause at 51. Has had three children, the youngest of whom is 24 years old. Has good family history. Her present trouble began with a slight bloody discharge one year ago last winter. The examination shows the cervix normal, and a body about the size of fist adherent to the left pelvic wall. The uterus is hard and there is a fetid discharge. She was enured about a year ago for hemorrhages and at that time was advised against operation. Dr. Porter asked "What should be the attitude of the surgeon under such circumstances toward the physician who gave such advice in a case of this kind?"

Tumor of Parotid; Endothelioma.—Case report and patient exhibited by Dr. Porter. This is a so called mixed tumor of the parotid. This tumor has been there for 38 years, but has grown rapidly of late. It is essentially but mildly malignant. The question is, where does the trouble commence? In this case there was a very complete capsule. This growth involves the glandular structure per se. Dr. Rhamy pronounced it endothelioma.

Cold Abscess of Tubercular Origin.—Case report and patient exhibited by Dr. McCaskey. When the patient came to the hospital he was probably suffering from toxemia of intestinal origin. Dr. McCaskey later located an abscess under the deep fascia of the right loin. On opening the abscess it was found that it went up and back to the spine, and a few speculae of bone and material tubercular in character came away. The abscess was cleaned out and the cavity packed with a 1 per cent. iodine gauze for four or five days and then the patient put out on the street, as he thinks the outdoor exercise and freedom of movement is better for him than to be shut up in the hospital.

For Diagnosis.—Case report and patient exhibited by Dr. McCaskey. No diagnosis yet made. Patient was brought to the hospital for obstruction of the bowels, resulting from peritonitis, probably due to appendicitis. Patient single, age 20, and a farmer. His family history is negative. He had typhoid fever a great many years ago, from which he completely recovered. Ten days prior to admission to the hospital he had pain in the umbilical region and vomiting every few minutes. Daily movements of the bowels was

secured with cathartics and enemas. Yesterday the bowels moved three times, and patient is still vomiting. The belly is distended and very hard and tender over the entire surface; the condition not localized. Pulse 80, temperature $99\frac{1}{2}$ to 101.

In the discussion Dr. Porter said that he believes this to be a case of peritonism. He advises that no medicine be given, but only water for ten days, with rest and light diet. He thinks no operation is necessary for relief, but thinks the patient will recover.

Dr. B. Van Sweringen said that peritonism is an indefinite term and believes it is unwise to use it.

Dr. Beall suggested the possibility of tubercular peritonitis.

Dr. Gilpin closed the discussion by speaking on the remote pathology of the case and reported a case that was opened and a few mesenteric glands found enlarged.

Adjourned.

J. C. WALLACE, Sec.

(Meeting of April 28, 1908.)

Society met in regular session at the assembly room, with 22 members present. Meeting called to order by President Calvin. Secretary Wallace being absent Dr. Morgan acted as secretary. The subject of the evening was "Rheumatism." Dr. S. E. Mentzer read a paper on "The Etiology of Acute Articular Rheumatism." Dr. G. B. M. Bower read a paper on "Acute Rheumatism: Pathology and Clinical History." Dr. R. B. McKeeman read a paper on "Acute Rheumatism: Complications and Treatment."

In the discussion Dr. Drayer cited a case which had come under his observation of a man, aged 28, who had been ill one week and was convalescing, but suddenly became delirious, with a temperature of 107.6. After a hypodermic injection of morphin $\frac{1}{4}$ grain the temperature rose to 108.5. Patient died three hours later of acute articular rheumatism. Postmortem showed a temperature of 111 one hour after death. Dr. Drayer says that acute rheumatism is a specific infection. He objects to woolen clothing in any acute febrile disturbance. He says the usual dose of salicylates is too small.

Dr. Boyers, in referring to damp climates, claimed that they do not predispose to acute rheumatism, saying that more cases were found in the Rocky Mountain district than in damp regions. He gave as a reason that people do not perspire in high altitudes. He advocates rest in bed until entirely well, and large doses of sodium salicylate. He says that children who have tonsillitis should be watched carefully, as this condition predisposes to rheumatism.

Dr. Rothschild reported a case of acute articular rheumatism in a woman 75 years of age which ran a typical course. He said that cases of salpingitis frequently have rheumatic pains.

Dr. Rhamy said that the bacterial origin of rheumatism is not settled. He thinks it is due to different organisms. He says hyperpyrexia occurs just previous to death in these cases and continues after death. He says these very high temperatures may not be what is ordinarily called fever, but a disturbance of the heat centers.

Dr. Rawles discussed cases following tonsillitis, reporting a case with a temperature of 107, with recovery.

Dr. Whitson of Muncie discussed hereditary predisposition.

Dr. English said that he was disappointed in the fact that nothing new in treatment has been suggested.

He advocated the use of 30-grain doses of salicylates four or five times a day. He also advocated strychnin when there are symptoms of heart trouble. He objects to woollen underwear on patients who are in bed. He reported a case of large effusion in pericardium in rheumatic case.

Dr. Nierman said that patients usually diagnosed own case as rheumatism when it is often something else.

Dr. Beall reported a case following tonsillitis. He said that salicylates have been used over 100 years, being given as willow bark, which contains salicin. He advocates rest. Said that in the Isle of Madagascar there are few cases, although the altitude is low. He thinks the climate has little to do with rheumatism.

Dr. Greenwell said that heredity is certainly a factor in the disease. He said that chilling of the body when perspiring is often the cause. Tonsillitis should always be treated with salicylates.

Dr. Morgan objected to these patients wearing underwear while in bed, as it retards elimination. He said that high temperature often appears in a number of other diseases which may occur with rheumatism, as tetanus 110; uremic coma with convulsions 108, although without convulsions usually subnormal; injuries to cervical cord 110-112; sunstroke 112. The dose of salicylates is usually too small.

Dr. Calvin said that we do not know just what rheumatism is. He believes there are many causes, but perhaps the disease is bacterial in origin. He believes in keeping open the emunctories. He referred to tonsillitis as a causative factor which he said is contagious in many cases. He thinks hereditary predisposition exists, and reported a case bearing out his belief. He referred to the geographical location of disease. The disease is worst in the northwest and around the great lakes. He said that in this region everybody had malaria a few years ago, and consequently a pathological condition of liver and spleen exists, making impaired elimination as cause of rheumatism. He said that if any mistake in treatment is made it is giving too much salicylate and not enough eliminants. He said "Clean out the sewers."

Dr. Mentzer closed by saying that climate, in his opinion, has little to do with disease, and the same is true of seasons. He read abstracts from his paper answering most of the questions asked.

Dr. Bower said that high and dry climates of the Allegheny mountains have no rheumatism.

Motion was carried that the paper of Dr. Rosenthal read before Twelfth Councilor District Medical Society be referred to the State Society.

Motion was also carried that the paper of Dr. Duemling on "The Uterus as a Pelvic and Abdominal Tumor" be referred to the State Society.

Adjourned.

E. E. MORGAN, *Sec. pro tem.*

(Meeting of May 5, 1908.)

Society met in regular session in the assembly room with twenty-two members present. President and vice-president being absent meeting was called to order by secretary. On motion Dr. L. P. Drayer was called on to preside. Minutes of two previous meetings read and approved.

Progressive Muscular Atrophy.—Case report and patient exhibited by Dr. McCaskey. Patient man, laborer, age 40. Family history negative. This condition was first noticed about one year ago when the patient complained of stiffness in the neck and shoulders, and

about the same time weakness in hands and thumbs. A little later he noticed a marked weakness of the arms, and twitching, this finally involving the inner aspect of the thighs. He lost in weight from 210 to 175 pounds. The muscles of his arms became shrunken and flabby. In 1896 patient was injured by a heavy railroad tie falling on his back in the lower dorsal region, which rendered him unconscious for perhaps half an hour, when he was able to stand, and in about an hour could walk. Following this accident patient was in bed for two weeks, when he felt able to again go to work. This history of injury is a little far away, but is of interest in the etiology. The laboratory findings were negative. There are groups of muscles wasted, his forearm now being only nine inches around. There is also wasting of the deltoids and infra and supra spinata. In addition to these atrophies, on close examination are found minute twitchings of these groups of muscles, which are fascicular contractions. The lesion is located in the anterior cornua of the spinal cord. In this case the elbow jerk is present, and the knee jerk is present and really exaggerated. There is no clonus and no Babinski. The absence of marked sensory symptoms excludes lesion involving the meninges and posterior nerve roots. The anterior cornua and crossed pyramidal tracts are involved. The diagnosis is progressive muscular atrophy with slight involvement of the cross pyramidal tracts. The electrical reactions in the lower extremities are normal, and but a little change in qualitative and considerable change in quantitative in upper extremities. The tendency in these cases is to progress. The treatment indicated is strychnin, and alteratives to build up the general health, as the best that can be expected is only to stay the progress of the disease.

Acute Rheumatism in Children.—Paper by Dr. L. P. Drayer, in which he says that he prefers to term the condition acute rheumatic fever. This disease is due to an infection with the germ *micrococcus rheumaticus*, and the tonsil is the point of entrance. He said that few if any of these cases occur prior to the third year. He referred to the comparative mildness of joint involvement and mentioned the frequency of heart manifestations and the frequent occurrence of primary endocarditis. The cardiac manifestations are the most severe ones, as there is a marked tendency to recurrence. Nodular rheumatism is the form peculiar to childhood. Erythema nodosum is now questionably supported as a form of rheumatism. The relation between chorea and rheumatism is very close. The most essential factor in treatment is absolute rest in bed, so far as possible.

Muscular Rheumatism, Clinical Varieties and Treatment, was the title of a paper by Dr. J. C. Wallace, in which he discussed lumbago, pleurodynia and torticollis. In treatment he called attention to the excellent results from application of heat with a hot iron.

Chronic Articular Rheumatism: Pathology, Symptoms and Treatment.—Paper presented by Dr. E. A. Crull, in which he said that change of climate and occupation are of value to the treatment. Concentrated violet ray with a small therapeutic lamp will give much relief, and piperazin water has given most excellent results in this disease.

In opening the discussion Dr. Weaver said that it is questionable whether vaccine therapy is of any value in rheumatism.

Dr. Morgan said that heredity plays an important part in the causation of rheumatism. Cases of tonsilli-

tis should be treated as if the disease were rheumatism and they will get well quicker. He recently made a postmortem on a young man who gave a history of rheumatism, finding the pericardium and heart glued together as though one organ. This condition had existed for a number of years. He said that nodules should be looked for more frequently than they are.

Dr. Beall said that muscular rheumatism should be regarded as general infection with local manifestations in the connective tissue. These nodules are microscopically the same as the nodules on the valves of the heart. He has seen three cases of erythema nodosum and no history of rheumatism was obtainable. He referred to a case of muscular rheumatism occurring in the back at 3 a. m., which lasted until 6 a. m., the condition remaining for about one month, and then got well of itself. Local applications are preferable.

Motion made and carried that Dr. Drayer's paper be referred to state society.

Dr. Kane spoke on heart complications.

Dr. Boyers said that salicylates made from the true oil of wintergreen should be used.

In closing Dr. Drayer said that more than two-thirds of the cases in children give a history of transmitted tendency. Chorea is due to some active toxin, be it rheumatism or what not. Piperazin water gives excellent results in selected cases.

As the meeting of June 2 occurs at the time of the meeting of the A. M. A. motion was made and carried that this meeting be postponed.

The following applications were read and referred to the board of censors: Drs. D. E. Kauffman, W. F. Schrader, W. A. Connolly, George J. Stinder, H. E. Steinman, Edward Kruse, C. C. Kimmel, J. E. Bickel, S. F. Henderson, E. H. Underwood, P. S. Titus, John McArdle, H. K. Mouser, B. Clark, H. A. Ray, W. H. Thompson, Edward Moser and Joseph D. Morgan.

Adjourned.

J. C. WALLACE, Sec.

(Meeting of May 12, 1908.)

Society met in joint session with the Fort Wayne Retail Druggists' Association in the assembly room. Meeting called to order by President Calvin, with twenty-four members present. Minutes of previous meeting read and approved. The applications read at previous meeting were reported on by the board of censors, and on motion the secretary cast the ballot of the society for them.

The Relation Between the Medical Profession and Druggists was the title of a paper by Mr. C. B. Woodworth, one of Fort Wayne's prominent druggists, in which he said that this relation should be harmonious, as they are both useful one to the other in the care of the sick. Conditions are different than they were years ago, when the druggist had to mix his own drugs and make his pills, but now all he has to do is to measure out some liquids and write the directions, many times having to go to the wholesale house and buy an original package, paying from 75 cents to \$1.50, then charging the patient only 40 or 50 cents for the prescription, when the chances are that the druggist will never have an opportunity to use the same compound again. He thinks the doctor should be able to prescribe for himself and not let the other fellow do it, and then the druggists could again make a fair living and keep up the dignity of their profession. He said that overmedication was universal in this country, and that it was the cause of a great percentage of the mortality among infants. Frequently people come

into his store wanting him to prescribe something for their ailment, and he invariably refers them to some physician, telling them that he might do them harm by giving something not required in their condition, and generally succeeds in having them consult a doctor. He says that he does not approve of counter prescribing, nor does he think that the physician should dispense his own medicines, for the reason that if he does not find what he wants in his limited stock he will invariably substitute for the next best.

The Physician and the Pharmacist.—This paper was read by Dr. A. P. Buchman. He spoke at length concerning the use of proprietary medicines by physicians, calling attention to the fact that if we would use the drugs listed in the U. S. P. and N. F. and fit the medicines to the patient and not the patient to the medicines the results would be much better, and the physicians would also be doing a very good thing for the uplifting both of the medical profession and the pharmacists. The medical profession needs the good druggist. He also said that he can not imagine a divorcement of the mutual working interests of the pharmacist and the physician; however, it is incumbent that the pharmacist shall practice pharmacy and the physician practice medicine.

In the discussion Mr. E. L. Mertz said he wished there would be less proprietaries.

Dr. Bulson said that there are two things that tend to increase the number of proprietaries: (1) Ignorance of materia medica and therapeutics among medical men who are constantly looking for something to cure disease and to make the practice of medicine easy. (2) The money in it for manufacturers. The active co-operation of the intelligent active practitioners of this country is needed to help the present crusade against proprietaries in order to win out. There are three ways in which the medical profession can overcome this evil: (1) They must refuse to accept samples of proprietaries. (2) Never prescribe them. (3) Refuse medical journals that accept nostrum advertisements. There must also be influence brought to bear on the public press.

The discussion was closed by Dr. Buchman and Mr. Woodworth.

Motion made by Dr. Bulson that a committee of three physicians be appointed to confer with a committee of three druggists to consider evils mutually felt, and advise means for their correction and to take into account the prescribing of proprietaries, dispensing by physicians, and counter prescribing by pharmacists.

Adjourned.

J. C. WALLACE, Sec.

ELKHART COUNTY.

The Elkhart County Medical Association met in regular session May 7 in the rooms of the Elkhart Academy of Medicine. Minutes of previous meeting read and approved.

Official Surgery.—Paper presented by Dr. W. B. Kreider. He said that the official philosophy deals with the lower orifices of the body, especially those that are guarded by the sphincter muscles, as the rectum and both the male and female urethra. These orifices are supplied with two sphincters, the upper and the lower. The upper in each instance is composed of involuntary muscular fibers, and is consequently supplied by sympathetic nerves. The lower

sphincter is made up of voluntary muscular fibers and is governed by the cerebrospinal nervous system. Since the blood stream is responsible for all bodily commerce, it is the duty of a physician to see that it is free and not blockaded in any of its parts. The harmony of the sympathetic nervous system is responsible for this action. In all forms of chronic troubles there is sympathetic nerve impingement, either in the rectum or the sexual organs, or both. To institute nutritive changes in the body the official surgeon does all around official work, such as dilation of the rectum, removal of hemorrhoids, pockets and papillæ, repairs lacerations of the cervix and perineum, eircumeises the long and adherent prepuce in the male, and unhooks the clitoris in the female. All these procedures stimulate sympathetic nerve action, flush the capillaries and cure many chronic cases that are declared hopeless.

The paper was discussed by Drs. Kuhn, Lemon and Benham. It was evident from the discussion that physicians in general do not agree with Dr. Kreider, although it was conceded that much good is accomplished by the official surgeon. But many are operated on with no improvement whatever. It was generally agreed that where a pathological condition exists it should be discouraged. No operation should be undertaken without a definite knowledge that diseased conditions exist, and the prognosis favorable after the operation. It was brought out in the discussion that Dr. Kreider has cured a number of very bad cases of neurotic states by official surgery. It is evident that many physicians have not investigated the subject. As Dr. Kreider was obliged to take an earlier car he could not close the discussion.

Gastric Ulcer was the title of a paper by Dr. J. C. Fleming. He said that gastric ulcer occurs clinically in two forms, (1) the round or peptic ulcer, occurring in young chorotic females 15 to 30 years of age, which heals rapidly under proper rest and treatment, and (2) the chronic ulcer, a large, irregular ulcer, occurring during the course of chronic gastritis. The symptoms may be typical, doubtful or latent. They are (1) pain or tenderness, (2) hematemesis, (3) hyperacidity; these making up the so-called typical triad, and to which may be added vomiting, pyrosis, anemia and emaciation. The course of the gastric ulcer is eminently chronic, showing great tendency to recur. Sear's observations show that 50 per cent. recur within five years. It is doubtful if large ulcers ever heal. Gastric ulcer is subject to the same pathological laws as an ulcer in any other part of the body. If recognized early and treated properly it will heal rapidly. If allowed to go on until the edges become hard and indurated it is hard for it to heal. As to what constitutes a cure, Edwards says nine months without symptoms and Musser two years without symptoms and absence of occult blood for a long time. The complications of gastric ulcer are perforation, perigastritis, hemorrhage and malignant degeneration of stenosis.

As to treatment he said that a patient with a gastric ulcer is in a critical condition, and should be put to bed for a period of at least four weeks. As preliminary treatment he advises seven to ten days of starvation and rectal feeding, followed by a period of two weeks on liquid diet, small amounts five or six times a day, this being followed by another week or ten days of light diet, and gradual return to regular diet. Regarding surgical treatment, he said that uncomplicated gastric ulcer is a medical disease. Cannon's and Maury's experiments have proved that if the pylorus

is patent the food will pass through the pyloric opening rather than through the stoma produced by gastroenterostomy, and that the stoma of the gastroenterostomy will close in a very short time if the pylorus is patent. Musser's classical report of 1,871 hospital cases of gastric ulcer collected from literature from 1897 to 1907, and 586 cases obtained from private communications prove conclusively that uncomplicated ulcer is a medical disease, and that complicated ulcer is sometimes a surgical disease. If perforation occurs it is always a surgical disease, if hemorrhage occurs acutely it is rarely a surgical disease, and if repeated and chronic in spite of medical treatment it is a surgical disease. If symptoms of obstruction of pylorus, hour glass contraction or adhesion persists in spite of medical treatment it is a surgical disease. However, he says that pylorospasm must be ruled out before resorting to surgery. If symptoms of gastric ulcer continue in spite of medical treatment and ineapacitate or threaten life the case is surgical.

Following the reading of this paper Dr. James A. Work, Jr., gave laboratory tests and examinations of the contents of the stomach and very nicely demonstrated the tests as they were brought out by Dr. Fleming. It was clearly shown what can be done in the laboratory in the diagnosis of stomach diseases.

In opening the discussion Dr. I. W. Short said that the pain in gastric ulcer was very depressing. In perforation the condition is one of collapse.

Dr. O. H. Stauff said that she agreed with the essayist that the patient should be put to bed and kept there for three or four weeks, but the condition and surroundings of some are such that it is impossible to carry out this procedure. It is a problem what to do with such unfortunates.

Dr. H. K. Lemon said that he can not agree with the essayist that a dilated stomach may not be pathological. He also says that ulcers of the stomach should be considered as surgical and not medical cases.

Dr. J. B. Porter said that ulcer of the stomach is not so easily diagnosed as one might think by reading the various articles on this subject. He affirms that many errors are made in these cases that are not cleared up until on the postmortem table. He mentioned a case that had only a few symptoms of ulcer of the stomach, but in consultation with Dr. B. F. Kuhn it was decided to operate on the man. The operation verified the diagnosis and the man made a good recovery.

In closing the discussion Dr. Fleming reasserted that a dilated stomach was not pathological if it empties itself in seven hours.

Motion was carried that a committee of three be appointed to secure material for scientific work. The president appointed Drs. Spohn, Stauff and Lemon.

Adjourned.

GEORGE W. SPOHN, Sec.

FRANKLIN COUNTY.

The Franklin County Medical Society met in regular session Monday, May 4, in the Court House, Brookville, with a good attendance of members and several visitors present. Meeting called to order by President Patterson. Minutes of April meeting read and approved. The papers of the evening were by Dr. Phillip L. Mull of Oldenburg, on "Myxedema," and Dr. A. L. Preston, Fairfield, on "Rheumatism—What Is It?" These papers were greatly appreciated and discussed by all present.

The name of Dr. M. F. Cupp of Metamora was presented for membership and he was unanimously elected. Also the name of Dr. Charles Schum, the oldest physician in the county, was presented for honorary membership and he was unanimously elected. Dr. Schum gained his education in Austria and served in the Austrian army as a surgeon for a number of years.

The next meeting of the society will be held on Monday, June 1, at the Court House, Brookville, at which time Dr. J. C. Clawson of Cedar Grove will take up the subject of "Exophthalmic Goitre." There will also be a paper by Dr. S. A. Gifford of Laurel, the subject to be chosen later.

Adjourned.

C. H. MAYFIELD, *Sec.*

HOWARD COUNTY.

The Howard County Medical Society met in regular session at Kokomo Friday, May 1. Meeting was called to order by President Dr. R. H. Ross, with the largest attendance of the year present. Dr. J. N. Hurty, secretary of the Indiana State Board of Health, was the guest of the society, and delivered an address on "The Medical Inspection of School Children." All the members of the medical profession and the school authorities were invited to hear this address. Dr. Hurty advocated regular medical inspection of school children in that the physical ailments of children should receive proper attention, and that the conditions now so prolific in promotion of infectious disease may be remedied. He also dwelt on the necessary sanitary precautions and proper furnishings. The paper brought out a full discussion, not only from the physicians, but from Superintendent Ogg of the city schools, the high school faculty and School Board.

The society adopted the following resolution: "The Howard County Medical Society recommends that school children of the public schools of Howard county be required to pass a physical examination before entering school, and that the school authorities take steps to instruct teachers in these important matters." Other resolutions adopted were as follows:

WHEREAS, The International Congress on Tuberculosis will be held in Washington, D. C., Sept. 26 to Oct. 13, 1908, and,

WHEREAS, The said congress is being promoted by eminent scientists and philanthropists and is approved by the United States and all European governments, therefore be it

Resolved, By the Howard County Medical Society, that it most heartily extends its approval and support to the International Congress on Tuberculosis, and herewith directs that the president shall appoint delegates to represent said society at said congress, and be it further

Resolved, That the society send a copy of this resolution and a list of the names of delegates to the secretary-general of the congress, Colorado building, Washington, D. C.

The delegates appointed are: Dr. W. H. McClurg, Dr. J. W. Wright, Dr. N. C. Hamilton, Dr. J. M. Moulder, Dr. J. H. Carnelley and W. H. Martin.

In the evening Dr. Hurty lectured in Grace Methodist Church, under the auspices of the society, and the big auditorium was filled. His subject was "The Prevention and Cure of Tuberculosis," and has awakened widespread interest in Kokomo.

Adjourned.

WILL J. MARTIN, *Sec.*

KOSCIUSKO COUNTY.

The Kosciusko County Medical Society met May 5, 1908. The papers of the evening were by Dr. J. G. Nehrbas, Warsaw, on "Anatomy of Endocardium, Synovial Membranes and Peri-Articular Structures," discussed by Drs. Burket, McDonald, Yocum, Haworth and Howard; Dr. C. R. Long, Piercetown, on "Acute and Chronic Articular Rheumatism," discussed by Drs. Burket, Haworth and Cary; Dr. C. N. Howard, Warsaw, on "Muscular Rheumatism, Clinical Varieties and Treatment; Rheumatoid Arthritis," discussed by Drs. McDonald, Cary, Nehrbas, Long, Haworth and Burket.

At this meeting Dr. M. S. Yocum, of Montone, and Dr. J. G. Nehrbas, of Winona Lake, were selected as delegates to the State meeting to be held at French Lick June 18 and 19. Dr. C. Norman Howard was elected secretary-treasurer to fill the vacancy caused by the removal of Dr. C. A. Underwood to Danville, Ind.

The program committee was re-elected to prepare another six months' program to follow the expiration of the present one. Dr. G. W. Anglin was elected to fill the vacancy made on the committee by Dr. Underwood's departure to Danville. The committee is composed of: Chairman, Dr. N. Austin Cary, Silver Lake; Dr. G. W. Anglin, Warsaw, and Dr. C. Norman Howard, Warsaw.

Adjourned.

C. NORMAN HOWARD, *Sec.*

LAKE COUNTY.

The society met in regular session at Gary May 7 in the parlors of the Gary Hotel, with eighteen members and six visitors present. Eight new members were added, making the total membership fifty-one. A committee was appointed to arrange a joint meeting with the Lake County Dental Society and a motion carried to request from the district councilor a permanent organization for the Tenth District.

The first paper of the evening was by Dr. E. E. Evans of Gary on the subject of "Exophthalmic Goiter." After reviewing the physiology of the thyroid and parathyroid glands, the therapeutics of Graves' disease, both medical and surgical, the essayist presented a report of three cases, apparently cured or greatly benefited by the continued use of the tincture of belladonna combined with strychnia.

The discussion was opened by Dr. Shanklin, who briefly reviewed the history, diagnosis and pathology of the condition. He was followed by Drs. Loring and Oberlin.

Emergency Surgery was the title of the next paper, presented by Dr. W. S. Faulds of Gary. The author dealt with the exigencies of first attention, laying stress upon the necessity for greatest possible cleanliness. He favored the use of warm, moist dressings and the more general use of anti-streptococic and anti-tetanic sera. He then passed to the treatment of localized injuries and exhibited certain splints that in his hands had proven particularly efficacious in the treatment of fractures.

The paper was discussed by Dr. H. E. Sharrer, who recommended adhesive plaster approximation of facial injuries in preference to sutures because of the better cosmetic effect.

Adjourned.

WILLIAM D. WEIS, *Sec.*

MARION COUNTY.

INDIANAPOLIS MEDICAL SOCIETY.

(Meeting of March 24, 1908.)

The society was called to order by the President, Dr. Wynn. The minutes of the last meeting were read and approved. The application of Dr. Eugene Buchler was read the second time and referred to the Council. The evening was devoted to the discussion of the relation of the physician and pharmacist.

The Relation of Physicians and Druggists was the title of a paper by Dr. S. E. Earp. He said that the recognition of pharmacy as a profession gives a greater dignity to the relationship between physicians and druggists. The ethical relations between physician and pharmacist should be as far as possible the same as those between physicians. Schools of pharmacy, departments of pharmacy and other institutions, and laws regulating the practice of pharmacy, all contribute to the betterment of conditions. A faithful and conscientious druggist may be recommended by a physician, but not to the exclusion of other equally competent druggists. Courteous treatment is expected by physician and patient, hence the druggist has the right to expect the same in return, and an adherence to the unwritten code of ethics is essential. The essayist called attention to the method by which people imposed upon the druggist for the relief of a cough. The druggist has an opportunity to be a public benefactor by informing such persons that a cough is frequently a fore-runner of tuberculosis, the cure of which depends upon its early diagnosis. A rather optimistic view was taken in reference to substitution and counter prescribing and the evils which result from such practice were enumerated. As the world is getting better so are conditions of this kind improving, and men honest in their profession will not stoop to underhanded procedures. The public is being educated to the importance of hygiene, sanitation, and preventive medicine by the medical profession, and in this the pharmacist must help. He is in a position to render the physician's work more effective, but an occasional reference to the unwritten law of ethics between the physician and the druggist will not come amiss.

J. R. Francis also read a paper on the same subject, beginning with a brief review of the history of the two professions. He believes the whole discussion today revolves around four points: (1) The prescription itself. (2) The recommendation of medicines by the druggist. (3) Adherence to the standards of the U. S. P. and the N. F. (4) Professional courtesy. In regard to the first point, the ownership and copying and refilling of prescriptions, he fully subscribed to the conclusions of the joint committee of the Chicago Medical Association. The druggist should never recommend patent medicines, display them or allow his name to be attached to them. The author referred to the completeness of the Pharmacopœia and National Formulary and urged their general use. He pointed out the seductiveness of the large manufacturing pharmacist and his detail men; the glaring fact that the manufacturer is concerned not with the advance of scientific discoveries and the promotion of accurate investigation but primarily with the sale of his goods.

A Plea for the Use of the National Formulary and Pharmacopœal Preparations was the title of a paper by Frank H. Carter, in which he referred to the widespread and growing interest in these subjects and the

large number of meetings similar to this that are being held. Prescribing of regular remedies he believes to be desirable to all parties concerned, except the large manufacturer. Good effects from such prescribing mentioned by the author were, a close touch between the physician and his patient, greater accuracy and independence in administering remedies, cheaper supplies to the patient, a decent profit for the pharmacist for his skill, and a saving for the pharmacist of the necessity for filling up his shelves and tying up his capital with a great lot of proprietaries of doubtful value.

In the discussion Mr. E. H. Zimmer said that the manufacturing pharmacy business in 1905 was estimated at \$75,000,000. In a recent address, Professor Remington said that he could name two drugs, castor oil and phenolphthalein, which were advertised under seventy different names in various parts of the world. He blamed the druggists for their share in the present state of affairs. Too often they have emphasized the side issues in the articles in the drug business and made the actual preparation and dispensing of drugs a minor matter. At the present time the Pharmacopœia and National Formulary are guide boards pointing on the one hand to medical and ethical satisfaction and on the other hand to legitimate profit for the pharmacist. There is one caution to be given even if these authorities are followed; physicians will be urged to specify some one firm's brand of these official preparations, and if this is done it will compel the druggist to carry a number of brands of the same article, and only add to his burden. The National Association of Retail Druggists has issued a booklet to be had for the asking which will assist in the selection of regular remedies in the place of those of unknown composition which have been used to meet certain conditions.

Mr. Joseph Stokes said that when physicians shall see that the pharmaceutical profession generally is competent to perform its work and that it refrains from attempting the work of a physician for which it is not fitted, pharmacy will be certain to receive the support and endorsement of medicine. What the druggist should do is to so conduct his business as to appeal to all classes of physicians, the one who dispenses his medicine as well as the one who writes prescriptions. The physicians have done much to encourage the habit of self-medication, and bring criticism on the druggist for counter prescribing, by telling patients to get certain articles from the druggist, giving the names of the drugs so that the patients know what they are using and are almost sure later to secure those articles on their own responsibility and advise their use by others. Two-thirds of the proprietary articles, he declares, are sold over the drug store counter without a prescription.

Dr. C. R. Schefer said that the great question is, What is the remedy? The fault and the remedy lie to a great extent in the medical school curricula. The school should be prepared and equipped to teach pharmacology by modern laboratory methods. Given a student well trained in the physiologic action of drugs and their chemistry, and he will write intelligent prescriptions and not depend on proprietary preparations. There should be animal experimentation and clinical study as well as pharmaceutical handling. Doctors should be discouraged from taking an interest in the manufacture of preparations for their own financial profit.

Dr. W. H. Forman agrees with Dr. Schaefer as to the deficiencies in the medical school curricula. One obstacle in the way of a rigid adherence to the Formulary is the time and study necessary for an article to be placed in the Formulary and its constant tendency to become obsolete. This hiatus is now being filled by the Council on Pharmacy and Chemistry of the A. M. A., and attention to the work of this body will give the information desired on new preparations, as they appear. Ethics is largely a matter of the individual. A drug or a preparation may be classed as ethical, but if its action is unknown to him who prescribes it the remedy is unethical, for him. Nothing given ignorantly can be ethical. He believes that no preparation should be prescribed that can not be prepared by any competent local pharmacist. Self-medication is greatly increased since the multiplication of proprietaries. Loss of respect for the medical profession on the part of the public will surely result if patients discover doctors using proprietaries which they publicly and ostentatiously denounce. When the speaker read the letter of Edward Bok in a recent issue of the *Journal of the A. M. A.*, he did not accept the assertion as to the frequent use of proprietaries by physicians. Subsequently upon examination of 800 prescriptions in the city he found that 45.5 per cent. called for proprietaries either wholly or in part.

Dr. Theodore Potter recalled that eleven years ago he presented to the society a paper on the same subject, the publication of which paper he had some difficulty in obtaining because of the hold the manufacturers had on the journals through their advertisements. Simplicity in prescribing is the first great lesson in the reform movement. The number of proven useful drugs is very small. The masters of medicine in days gone by and now, exercise the greatest simplicity and care in the use of drugs. This was impressed upon him in his work as an interne under Whittaker. In recent years we have been led astray by commercial interests.

Dr. F. R. Charlton suggested that this society begin the propaganda for reform in this region and that a committee be appointed to draw up a circular letter to the physicians of this county setting forth the attitude of this society in the matter. Motion carried and the chair appointed Drs. Potter, Charlton and Earp on this committee.

Dr. G. W. Woollen spoke of his student days under his preceptor, Dr. Bobbs. For some time he filled all the prescriptions for the latter and was impressed with the simplicity of his therapy so far as drugs were concerned. The curse of practice to-day is polypharmacy. If a correct diagnosis is made the drug indications are almost always very similar.

In closing the discussion Dr. Francis was asked if the society would be willing to take joint action with the local branch of the American Pharmaceutical Association. On motion this was ordered, and the chair delegated this work to the committee just appointed.

Adjourned.

R. H. RITTER, Sec.

(Meeting of March 31, 1908.)

Society called to order by the president, Dr. Wynn. Minutes of previous meeting read and approved. The applications of Drs. Arthur M. Calvert, Roy Egbert, Barclay Ratcliff and John J. Booz were read the first time and ordered posted. The Council reported favorably on the application of Dr. Eugene Buehler and the report was adopted. The Secretary called atten-

tion to the death, during the past week, of one of the active members, Dr. Franklin W. Hays. On motion the Secretary was instructed to prepare a suitable minute for this occasion.

Scoliosis was the title of a paper by Dr. David Ross. The term was defined as excluding the compensatory curves. In the etiology sex seems to make a little difference, the excess of females being most likely due to inconvenience caused in matters of dress. Although no ages are exempt the condition is more common during the formative periods. The etiologic factors are, deformities, as shortening of one leg; paralysis, especially anterior poliomyelitis; occupation, as in school children, stone cutters, etc.; congenital lateral curvature, a rare condition; heredity, probably a small factor. Symptoms: The first thing noticed is often weakness and awkwardness of child. The deformity is accompanied or sometimes preceded by pain, generally of a dull dragging nature. Muscular coordination is often wanting, and neurasthenia and hysterical symptoms are often present, culminating sometimes in all the unpleasant symptoms of misplaced viscera. Diagnosis: Inclination of the body to one side; rotation of the spine, curve shown by line of spinous processes in the erect posture. Prognosis: Good when taken early. Disease curable and prognosis better in cases beginning later in life than for early childhood. Treatment: principal is laid down by Whitman: First, to overcome all restriction to passive motion; second, to strengthen weakened muscles, especially those whose action is opposed to deformity; third, to insist on the avoidance of all over fatigue and improper postures; fourth, to support the weak part by a brace if the deformity can not be otherwise corrected.

In opening the discussion Dr. J. H. Oliver spoke of the necessity of doctors and mothers observing children during their growth. Too often this condition is wholly overlooked until the stage of fixation, only to be discovered by the dressmaker. Straight backs for children require vigilant maternal care. Rest in bed and an abundance of nutritious food, massage, and later intelligently directed gymnastics are essential elements in treatment. Faulty postures are assumed to compensate for weak, contracted and painful muscles, the brace being a last resort. The speaker uses the brace in but a small percentage of cases, and then merely for fixation and the prevention of further deformity.

Dr. Charles R. Sowder referred to the interest that should be aroused in the internalist in this direction. His duty is to educate mothers in the examination and care of their children. Much can be accomplished by public play grounds, baths, and rational school furniture. One of the bad results of this deformity is the diminution of the respiratory capacity and a consequent deficiency of oxidation. Curvature sometimes follows empyema, still further affecting respiration. Prophylaxis is all important. Neurasthenic symptoms in these cases are resultant upon a general systemic depravity, and a depression of practically all the vegetation functions.

Dr. Guido Bell said that this subject is of especial interest to the school sanitarian, as the seating of children is of prime importance. The child should sit with both feet squarely on the floor, the whole length of the thigh on the seat, the elbows comfortably on the desk and the desk overhanging the seat so that the child could write without leaning too far forward.

Dr. D. F. Lee has seen a number of these cases following chorea. Faulty seating is doubtless a factor. Leather cases have in his hands afforded almost immediate relief of the deformity and cessation of the choreic manifestations and eventually a complete cure.

Dr. Nelson D. Brayton, home on a furlough from the Ancon Hospital at Panama, was requested by the president to tell something of his work and the conditions there, which he did in a very pleasant manner.

Adjourned.

R. H. RITTER, Sec.

(Meeting of April 7, 1908.)

Society was called to order by President Wynn. Minutes of last meeting approved without reading. Applications of Drs. Jacob Buehler, Frank E. Abbott and Freeman H. Hibben, having been posted thirty days were read the second time and referred to the Council. The committee appointed at a previous meeting to draw up statements expressing the attitude of the society regarding prescribing non-authorized preparations reported through its chairman, Dr. Potter. Secretary was ordered to have this report printed and to mail it to every practitioner in Marion county.

A memorial prepared by Dr. Brayton for the late Dr. F. W. Hays, was read and made a part of the minutes. Program was made up of case reports.

Double Mastoiditis Followed by Left Sigmoid and Jugular Vein Thrombosis.—Case report by Dr. J. F. Barnhill. Operation. Recovery. Girl aged 16. Five weeks ago had severe attack of measles and discharge in both ears. Three weeks later discharged by attending physician, followed by high temperature, chills, double vision, syncope, and profound deafness, pain over both mastoids; both ears discharging. Both mastoids cleaned out and free communication established between mastoid wound and middle ear. Extensive cellulitis on left side and osteitis on right side, marked. Patient took ether badly. No pain following operation and general condition improved. Continuous fever, rising to 104 on the tenth day and 105½ on the twelfth day. Leucocytes 18,000, with 80 per cent. polymorphonuclears. Diagnosis of sinus thrombosis on the left side because that side had been the worst of the two. Sigmoid sinus widely exposed toward the torcular and jugular ends. Vessel incised for a distance of about two inches, the upper end being found filled with a firm coagulum and the jugular end contained creamy pus. No fluid blood secured from the direction of the jugular bulb. Mastoid wound packed and jugular vein exposed from the entrance of thyroid upward. It was found thrombosed from entrance of facial upward, hence was ligated below the facial and completely resected above as far as possible. A small cigarette drain was inserted the full length of neck wound. Subsequent course uneventful.

Extreme Mobility of the Tongue.—Case report and patient exhibited by Dr. S. A. Johnson. Patient with slight effort could place tip of tongue in naso-pharynx and palpate all structures in that region. Tongue large and loosely attached to points of leverage. Pharyngeal vault spacious and remarkably short antero-posterior diameter of palatal bone. No lesion of the naso-pharynx.

Cardiac Neurosis.—Two case reports by Dr. E. C. Thomas. Case 1. Woman aged 39, true palpitation. Neurotic, with attacks of cardiac irregularity for the past two years. Present symptoms: Sense of impending danger, great fear, dyspnea, precordial pain, occasional nausea and eructation of gas. During paroxysms many deviations from normal heart action are

shown by sphygmographic tracing; the paroxysms lasting from a few minutes to an hour. Predisposing causes seem to be the approach of menstruation, acute attacks of indigestion and constipation.

Case 2. Woman aged 42. Tachycardia, attributed to vomiting and diarrhea, with nerve shock eight years ago predisposing.

Dr. J. R. Eastman exhibited Carwardine clamps and discussed their value as compared to the Murphy button and other clamps for gastroenterostomy.

Dr. W. F. Clevenger reported two cases of primary nasal and pharyngeal diphtheria.

Multilocular Cysto-Sarcoma of the Ovary.—Case report by Dr. Moses Thorner. Woman aged 65, first became conscious of tumor six months before being referred to Dr. Thorner. Complained of dysuria, constipation and bearing-down pains. General condition good; other viscera negative. Left ovary incorporated in large cystic mass, slightly adherent to omentum, side of uterus, and abdominal parietes; right ovary cystic; and was also removed; uneventful recovery. The growth is undoubtedly of connective tissue origin. In certain phases presented there is a question as to whether it is simple sarcoma or whether it is of endothelial or parathelial tissue origin, the cysts being extraordinary dilations of the lymphatic spaces in the ovarian structure.

Penetrating Wounds of the Abdomen.—Dr. Paul F. Martin reported two penetrating gun shot wounds of the abdomen and two penetrating stab wounds, with recovery of all but one.

Pleurostomy for Infection of Lung and Pleura.—Dr. J. V. Reed reported four cases. Case 1. Child 6 years old. Left lobar pneumonia with pyothorax on the twentieth day. Sub-pericostal resection of 1¼ inches of eighth rib. Lung collapsed, pleura covered with a thick layer of fibrin; double drainage tube. Two days later general condition improved, but lung permanently collapsed and covered with necrotic exudate. Tube replaced by one with flange, making closure airtight about wound. Aspiration with bottle and manometer. Negative pressure, 30 millimeters, aided in expansion of lung, with passive hyperemia of pleura. Completed expansion of lung in four weeks. Subsequent history uneventful.

Case 2. Boy 5 years of age. Right-sided lobar pneumonia. On seventeenth day resection of rib for pyothorax, with immediate lung expansion. Convalescence rapid.

Case 3. Boy 2½ years of age. Nine months previous to admission right-sided pneumonia followed by pyemia. Operated on two months later but did not heal for five months. On admission was greatly emaciated, temperature 100 to 101, leucocytes 15,000, dullness and absence of breath sounds over lower left side of chest. At operation no pus was found in pleural cavity nor on aspiration of lungs at several places. Drainage tube inserted and walled off with gauze, passing the base of the lung. Second day after operation dressings found soaked with pus, abscess of lungs having evacuated through path of least resistance.

Case 4. Male aged 45, typical typhoid fever, with marked bronchial symptoms.

Adjourned.

R. H. RITTER, Sec.

(Meeting of April 14, 1908.)

Society was called to order by President Wynn. Minutes of last meeting read and approved. Dr. F. C.

Heath called attention to the meeting of the State Society at French Lick, and the necessity of the early selection of papers for preliminary program to appear in the next issue of THE JOURNAL.

The Technique of Harelip and Cleft Palate Operations.—Paper by Dr. J. R. Eastman. No abstract furnished.

The discussion was opened by Dr. J. H. Oliver, who said that despite the legion of operations described text-books were adhering to the older methods. Age limit is being pushed steadily backward. He now operates for both conditions within the first month instead of later as formerly, believing that the shock is not so great, the tissues softer and more easily moulded. He objects to the Lane operation on account of the contour of the mouth which it makes. He has come to approve thoroughly of Brophy's operation, and prefers horse hair almost exclusively for closing the soft palate, beginning his sutures high up, making the floor of the nose first. Plenty of time is essential, making the operation in as many stages as desirable rather than attempt too much at one operation.

Dr. H. R. Allen deprecates the use of any one method to the exclusion of all others. He favors early operation and Brophy's plan. Instead of Mayo's retention suture tapes, he has devised two lateral lead cleates, held by chromicised catgut sutures. If the nose remains unduly prominent a triangular segment from the cartilage may be removed with good cosmetic effect. Care should be taken to avoid the notch in the vermilion border often seen. He mentioned the spring arrangement to prevent tension on the lip.

The Present Status of Syphilis, by Dr. A. W. Brayton. The essayist dwelt chiefly on the sociologic and physiologic bases of venereal disease and referred to the advance that had been made in the study of syphilis. He has little faith in the present agitation and lecturing to the laity on the nature and effects of this disease. There must be education of the people against prostitution and towards a pure family relation. He believes that the development of pure and simple home and family life, early marriage, more children in families, and the restriction of divorce are to be the greatest factors in the combat with venereal diseases.

In opening the discussion Dr. W. P. Garshwiler called attention to the past few years' advance in the knowledge and etiology of syphilis. Positive diagnosis by the finding of the spirocheta may be made early, whereas formerly it was necessary to wait for the appearance of the secondary lesion. Uselessness of extensive cauterization or excision of the primary lesion has also been established since the disease has already become general.

Adjourned.

R. H. RITTER, Sec.

(Meeting of April 21, 1908.)

Society was called to order by President Wynn. Minutes of last meeting approved without reading. Applications of Drs. Eugene Bishop Mumford and C. C. Wood were read the first time and ordered posted.

Obstruction of the Bowels was the first paper of the evening, by Dr. E. D. Clark.

Obstruction of the Bowels Due to Traumatism was the title of the second paper, by Dr. J. H. Ford.

In opening the discussion Dr. H. O. Pantzer said that the greatest difficulty now was in the right diagnosis. Temperature is a matter of great importance and should be taken with greatest care. Often the

thermometer in the mouth shows no elevation where rectal temperature may show a rise of two or three degrees. Frequently obstruction is a complication of appendicitis. An inflamed or active bowel is prone to obstruction, a normal or inactive one is not. Pancreatitis is often the cause of obstruction. Auscultation of the abdomen may show spasmodic action of the bowel in the movement of gas and fluid, splashing, etc. Light pressure in palpation is more valuable than the deep rough jabbing, in order not to give rise to pain, but to discover any that may be present. The custom of giving strong purgatives is pernicious, and is accountable for many fatalities.

Dr. S. P. Seherer emphasized the necessity of differentiating the character of the obstruction, some not being surgical and some, especially those without fever, that mend themselves. The paralyzed gut is the one demanding operation. Contrary to Dr. Pantzer's statement he has seen several cases in the extreme condition where purgatives relieved it and surgical interference was unnecessary. Many cases have been fortunate in getting well because they refuse surgery.

Dr. O. G. Pfaff said that the surgeon is made to operate as a dernier ressort. He operates as rapidly as possible, handling the gut as little as possible. If no more, get out one loop of the intestine and relieve the condition without attempting any refinement of the diagnosis since the primary cause is not necessarily important at this time, the object being to relieve the obstruction. Price's advice is "Get in quickly and for God's sake get out quickly." He condemned too active purgation.

Dr. D. F. Lee believes the condition not so distinctly surgical as might be inferred from the papers read. Brilliant results are achieved from high colonic flushing when laparotomy should certainly have been inexcusable. Surgery as well as medicine has its place.

Dr. A. B. Graham would distinguish between constipation or impaction and true obstruction, the former yielding to cathartics and colonic flushing but the latter to surgery only. The papers deal with real obstruction, hence only surgical procedures are to be considered, the greatest desideratum being earlier diagnosis and hence earlier operation. A previous history of tuberculosis or malignant growth or a long continued and slow undermining of the general health on which are ingrafted acute symptoms, make the diagnosis simple. Incidentally he referred to the defects of the ordinary colon tube which is so liable to eurl in the rectum and thus fail to throw the water up into the colon. He advises the Wales bougie for colonic injections.

Dr. T. B. Noble would operate in old cases of fecal impaction, since around such an old mass, often hardened to the consistency of stone, there sometimes develops inflammation, ulceration and the formation of cicatricial bands producing true obstruction. Dilatory tactics in treatment are responsible for the high mortality, and physicians should not be responsible for such procrastinations. If Dr. Clark would say to operate in six hours he would say to operate in six minutes after the correct diagnosis was made if it were possible.

Dr. E. C. Thomas referred to the absolute refusal of many patients to submit to operation and the consequent dilemma of the attending physician. Under such circumstances only purgatives and enemas can be made use of with a hope for the best. Physicians are often criticised for not having their patients operated on when they are powerless to do so.

Dr. J. R. Eastman insisted that wisdom and nice judgment were as necessary in handling these cases as in any other condition. Operation should follow immediately upon definite diagnosis of obstruction. Mild cases yielding to purgatives and enemas are not real obstructions. The one essential of success is the early recognition of the syndrome of ileus, then waste no time with colonic lavage, but open the abdomen.

Dr. Clark and Dr. Ford then closed the discussion.
Adjourned. R. H. RITTER, Sec.

NEWTON COUNTY.

The Newton County Medical Society was organized May 1, and the following officers elected: President, L. H. Recher, Morocco; vice-president, J. W. Merry, Mt. Ayr; secretary, J. G. Kinneman, Goodland; treasurer, C. E. Triplett, Jr., Morocco; board of censors, G. H. Van Kirk, Kentland, and H. F. Leedom, Morocco; delegates to the state association, T. E. Collier, Brook; F. Kennedy, Goodland, and W. M. Porkison, Brook; program committee, B. W. Pratt, T. E. Collier and J. G. Kinneman. The society was organized with the following members enrolled: B. W. Pratt, C. C. Bassett, Frank Kennedy, John G. Kinneman, Goodland; T. E. Collier, W. M. Porkison, Brook; C. E. Triplett, Jr., L. H. Recher, H. F. Leedom, F. L. Morehouse, Morocco; G. H. Van Kirk, H. M. Campbell, J. W. Merry, Kentland.

The annual dues of the society are \$3.00.

Adjourned. J. G. KINNEMAN, Sec.

ST. JOSEPH COUNTY.

The St. Joseph County Medical Society met in South Bend April 6. The first paper of the evening was by Dr. E. P. Wagner on "The Anatomy of the Lungs," making use of some well executed blackboard drawings. Dr. H. M. Miller reviewed the "Physiology of Respiration." The subject of "Normal Physical Diagnosis" was presented by Dr. W. H. Baker.

Adjourned. CHARLES H. BOSENBURY, Sec.

At the meeting of April 13, Dr. S. W. Baer read a paper on "Chronic Bronchitis," which was freely discussed by those in attendance.

Adjourned. CHARLES H. BOSENBURY, Sec.

At the meeting of April 20, the general subject was "Pneumonia." "The Etiology and Bacteriology" were discussed by Dr. C. S. Bosenbury, "The Pathology" by Dr. W. M. Peek and "Symptoms and Signs" by Dr. C. E. Hansel. Many of the members present took part in the discussion.

Adjourned. CHARLES H. BOSENBURY, Sec.

At the meeting of April 27 Dr. W. G. Wegner read a paper on "Pleurisy." Dr. H. T. Montgomery gave a talk on "The Treatment of Lobar Pneumonia," relating his experience with large doses of quinin, which gave favorable results in his cases. He recommended the use of this agent, not in small 5-10 grain doses, but in 40-60 grain doses after the plan advocated by Galbraith. In the discussion which followed several members opposed the treatment on theoretical grounds, while a few who had used quinin in massive doses were convinced that it very materially altered the course of the disease.

Adjourned. CHARLES H. BOSENBURY, Sec.

BOOK REVIEWS

THE DEVELOPMENT OF OPHTHALMOLOGY IN AMERICA, 1800-1870. A CONTRIBUTION TO OPHTHALMOLOGIC HISTORY AND BIOGRAPHY. By Alvin A. Hubbell, M.D., Buffalo, N. Y.

This is a volume of nearly 200 pages and is a republication, with much enlarged text, of an address delivered before the section on ophthalmology of the A. M. A. at Atlantic City last June. The book contains twenty-nine portraits of pioneers in American ophthalmology and eight cuts illustrating the old eye institutions and ophthalmologic subjects.

NEW BOOKS. Messrs. W. B. Saunders Company, medical publishers of Philadelphia and London, announce for publication before June 30 a list of books of unusual interest to the profession. We especially call the attention of our readers to the following:

Bandler's Medical Gynecology—treating exclusively of the medical side of this subject.

Bonney's Tuberculosis.

Volume 2, Kelly and Noble's Gynecology and Abdominal Surgery.

Volume 4, Keen's Surgery, Gant's Constipation and Intestinal Obstruction.

Schamberg's Diseases of the Skin and the Eruptive Fevers.

John C. DaCosta, Jr.'s Physical Diagnosis.

Todd's Clinical Diagnosis.

Camac's Epoch-Making Contributions in Medicine and Surgery.

All of these works will be profusely illustrated with original pictures.

DISORDERS OF RESPIRATION AND CIRCULATION; PART 2. BRADYCARDIA AND TACHYCARDIA WITH BIBLIOGRAPHY. By Prof. Edmund von Neusser, M.D., Professor of the Second Medical Clinic, Vienna, etc. Authorized English Translation by Andrew MacFarlane, M.D., Professor of Medical Jurisprudence and Physical Diagnosis, Albany Medical College, etc. Cloth, pp. 150. Price, \$1.25. E. B. Treat & Co., New York, 1908.

This little volume, the second contribution to the subjects of cardiac and respiratory disorders, deals with the subjects treated in a most concise manner and proves even more interesting than Part 1 of the series. Etiology, pathology and diagnosis share sufficient space with clinical illustration to make the work remarkably readable, and one is led to wonder at the amount of ground that is well covered in so few pages. This is probably to be accounted for by the conciseness and terseness of the descriptions. In addition to the parts on tachycardia and bradycardia, there is an appendix containing an article by Howell on the Cause of the Heart Beat, another on the Adams-Stokes Symptom Complex, containing Adams' original article in full and abstracts of Stokes' and His' articles as well as abstracts from American and British medical literature and foreign bibliography on Adams-Stokes' diseases and tachycardia. Altogether an exceedingly interesting and well written little work is here presented to the profession.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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ISSUED MONTHLY under Direction of the Council

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ORIGINAL ARTICLES

THE PHYSICIAN AS A CITIZEN.*

DAVID C. PEYTON, M.D.

President of the Indiana State Medical Association.

JEFFERSONVILLE, IND.

To be a good citizen is the noblest attribute of man.

"Not what men *think* I am, but what I am, makes me a joy or sorrow to myself."

It was a saying of the great physician, Nothnagle, that "only a good man can be a good doctor." In this age of vast material development, the means, by some subtle alchemy, too frequently becomes converted into the end, and worldly success the only legitimate objective point of human endeavor. We need only to open our eyes a little way to see the great struggle going on about us; a struggle in which ethics, morality and the "square deal" play a rather pitiful part. Would enumeration not seem trite? Politics, even in high places, courts of justice, great corporations, legislatures, life insurance companies, those semi-elccemosynary institutions that seem to have been run chiefly for the benefit of the runner; many of the institutions that have been investigated in the last few years have been found to be rife with graft and greed and fraud and humbuggery.

The ethics of the hour condones any chicanery that wins a smile from the Goddess *Gold*. In this malstrom of cold business practicality, this seething torrent of raw human elemental strain and struggle, how exotic and fantastic seems the fine philosophy conveyed by that sentence, "only a good man can be a good doctor," and yet it is

true. The medical profession, while it may be infected in spots with the diplococcus of Mammon, is, in the main, sound. The fundamental altruism on which our guild rests renders us immune to this insidious malady. Yet I would not have you conclude from this that I wish to detract from the importance of the doctor taking a most serious view of the business side of his work, for ultra-altruism will not satisfy the exacting demands of modern commercial principles. The physician must establish and maintain a status, commercial and professional, in his community that commands the respect and confidence of his fellow-men. The doctor is a citizen in spite of the fact that he is a doctor; he is a citizen first and then a doctor, and as such he owes to his state a duty that can not be discharged by merely making money out of the misfortunes of its citizens. He should be patriotic in all that the word means, and the following description of patriotism by William Jennings Bryan is exceedingly good: "Patriotism is a virtue that must be displayed in peace as well as war, and may be defined as that love of country which leads the citizen to give to his country that which his country needs at the time his country needs it. In time of war the citizen may be called upon to die for his country; in time of peace he must live for his country. In time of war he may be called upon to give his body as a sacrifice; in time of peace his country demands his head and his heart, his intellect and his conscience. You have shown that you were willing to lay down your lives in order to purchase liberty; now you will be called upon to exhibit self-restraint and moral courage in dealing with problems of government."

Again, the following from the Honorable William H. Taft, who in a recent address spoke eloquently for the higher standard of those entering

* Presidential address delivered before the Indiana State Medical Association at French Lick, June 18, 1908.

the service of state and nation, when he said: "Assuredly there is a career in the public service. One may not prophesy for every man commendably ambitious to enter it that he will end an ambassador, but there is abundant opportunity for useful work. A good head and good health are necessary, with the disposition to work hard. There are opportunities on every hand for men to distinguish themselves by service of eminent value. As to rewards, I do not talk of rewards. For the class of men to whom I would have the idea of public service appeal the matter of rewards would be irrelevant. I say to you that there are rewards which are unknown to him who seeks only what he regards as the substantial ones. The best of all is the pure joy of service. To do things that are worth doing, to be in the thick of it. Ah! That is to live. The poor man who chooses this way will have to live plainly, as things go nowadays. At least he will not pile up a surplus of wealth. Why should he want to? We used to be told in a homely adage that a millionaire had no advantage over a poor man in his capacity for food and drink. Wealth provides small satisfactions, but not deep ones. It can give no felicity like that which comforts the man who has identified himself with something bigger than himself, which thrills the heart of the patriot, of the public servant." Let us see to it that we rise to the full measure of this duty.

In this connection, let us review briefly some of the more important things accomplished and point out others that should be the immediate object of our endeavors.

First, we are justly proud of the distinction we have attained by the consolidation of our medical colleges, thus placing medical education in Indiana entirely within and under state control, which makes us one of the only two states in the union taking this advanced ground in the matter of medical education. Minnesota being the other. The consummation of this high ideal lifts medical education in Indiana to a pinnacle that is, indeed, glorious. We have established a most salutary precedent, one that is the legitimate result of the state control of medical practice. If the state is to control the products of education, it is not only logical, but inevitable, that it must control the education itself. This is a duty of the people to themselves and one from which there is no escape. It is, however, greatly to the credit of the medical profession of our state that in this instance, as in many others, the physicians have taken the initiative in a strictly *pro bono publico* spirit. In order that the things thus accomplished shall bear the best fruit, teachers should be selected by reason of their special

professional fitness for the subject to which they are assigned. Questions of earnings and dividends must be eliminated and medical teaching should have no interest whatever in the commercial results of its enterprise. It is not necessarily true that the school with the largest classes can do or is doing the best work, for the mere fact of abnormally large classes may be suggestive of ulterior methodism in their assembling. Success in teaching has to do with the very fundamental principle of preparedness in its broadest sense, and mere patronage can not and should not enter into the question. Modern ideas would seem to demand a reorganization of the general principles of teaching. Every efficient living thing is monocephalic, or single headed, which idea must obtain with every efficient educational agency. The teacher's duties to his students and the institution should be a first lien upon his time and his energies. Of course, the right of the teachers of the elementary branches to accept private practice is, and should be, limited strictly to the time they could spare from their duties to the state as represented in and by the institution with which they are connected, and as a matter of equity to the teachers and safe guarding the best interests of the students the temptation for these teachers to violate this obligation should be effectually removed by salaries sufficient to enable them to be independent of private practice.

In many respects our state occupies advanced ground in the matter of medical legislation. Our very efficient Secretary of the State Board of Health, together with the other members, not only of the Board of Health, but the profession generally, has secured the passage of many important and life-saving laws. In about seven years the Indiana State Board of Health has achieved the reputation of securing the most accurate mortality statistics of any state in the Union. The *Monthly Bulletin*, published by the State Board, in which is printed the state mortality figures, is in demand in all parts of the world.

The fact that tuberculosis causes the death of one out of every seven members of the human family, and that about five thousand die in our state annually of this disease, and that those ill represent many times this number, causing a loss to the state each year of millions of dollars, impresses us with the importance of any steps looking to its control, and the further fact that this disease is not only absolutely preventable, but curable, if taken in its incipency, is cause for congratulating the people of Indiana that the legislature of 1907 made provision for, and a site

for a State Hospital for Consumptives has been purchased. Much of the credit for this is due the State Board of Health, with Dr. Hurty in the forefront of efficient activity. Let us hope and see to it that the legislature of 1909 appropriates money for the necessary buildings and for the support of the institution.

Before leaving this subject—a subject, I regret to say, our legislatures and law-making bodies generally seem loath to have leave us—let us see for a moment, if you please, as to its national importance. In 1906 we had 160,000 deaths from tuberculosis, while we had 800,000 ill of the same disease. From typhoid fever in 1906 we had 28,000 deaths and 180,000 ill of this disease. Think of the enormous loss or cost to the country in dollars and cents. The loss of human life and the loss of time by reason of the hundreds of thousands ill each year of tuberculosis costs us a sum sufficient to not only maintain our great navy, but to build two first-class battleships each year. These stupendous facts are so startling that the average mind fails to grasp the cold, clammy situation of this unfortunate multitude.

The importance of the proposed National Department of Public Health is emphasized by these statistics, which show that existing public health agencies in Washington, which are scattered throughout the various departments of the government, are defective. The thousands of miles of our rivers from which we get a large supply of our drinking water, which are being daily converted into great sewers by being made the receptacle of all the filthy and infectious waste of a neighboring city, thus spreading typhoid fever broadcast, stands as a monument to the failure of the present system, and the ghosts of the sacrificed cry out in disgust. These and other startling data serve as a summons to the medical profession to a most important duty—one of medical legislation. The physician should bring not only his high general intelligence, but his valuable special intelligence to bear on legislative problems of vital importance to the public. Nobody knows so well as he the actual human bearing of economic conditions and of laws that modify them.

The limited number of physicians found in our state and national legislative bodies is to be accounted for in but one of two ways—either the medical profession or the public is ignorant of, or indifferent to, this most important condition of our civil and social duty to the general public. There were but four physicians in the two houses

of Congress of the United States during the session ending in Washington in 1907, while France, the other great republic of the world, had in the two houses ninety-two physicians. France, with a population of less than forty millions and about thirty thousand physicians, as compared to the United States with approximately ninety million people and about 125,000 members of the medical profession, makes a contrast at once so striking as to amount to a sociologic phenomenon. This being true, the question arises, Who are these men? What, for instance, is their status in their respective countries? They are a distinguished body of men, capable and sincere, and will compare quite favorably with their legislative associates, thus establishing the desirability, as well as the necessity of physicians as legislators. Not so much our right, but our duty to the state and its general good furnishes us an incentive, and, as I believe that service is the measure of greatness in the individual, so I believe that service is the measure of our greatness as a national body.

So let us turn to our own beloved profession, the noblest and most useful profession on God's footstool. Let us pause and think. Let us be honest with ourselves. Have we been active in methods of education having for our aim higher ideals? Have we been leaders in an effort for the general uplifting of our civic status? The intelligence we have acquired by reason of our contact with the innermost recesses of hovel and mansion, of cottage and palace, enlarges our capabilities; shall we exercise this intelligence in the halls of legislation for the benefit of the general public? It has a right to expect this of us, and we should see to it that we are not weighed in the balance and found wanting. Our profession boasts of cultured and able men—men who could discharge this duty with signal ability. Will they do it? None can do it better. Shall we not see them in greater numbers in our state legislatures and the National Congress? Our own Dr. Good, who is the nominee of his party for Congress from his district, deserves the active support of every member of the profession regardless of creed or party affiliation. In such times of emergency as confront us, when the evolution of the many modern and advanced ideas that are of such vast importance to the general public good, are burning questions of the hour that must and will be settled in the immediate future, none but brave hearts and proficient minds can be relied upon to render such an accounting of their opportunities as will

reflect credit upon our profession. Let us hope that other physicians may take a firmer hold upon the responsibilities so vital to our very civic life. In our own state in the legislature of 1907 the following names of physicians are mentioned as a roll of honor:

Dr. Horace G. Read, of Tipton County, who was most active in securing the sterilization law, which promises the only hope of preventing the perpetuation of paupers and criminals. His work will ever stand as a monument to advanced thought.

Dr. Frank J. Simison, of Tippecanoe County, who introduced and secured the passage of the free antitoxin law that has been such a boon to those of our citizens not able to afford this remedy which has made this once dreaded disease a subject of vigilance and not of fear.

Senator Evan L. Patterson, M.D., of Franklin County, who worked assiduously for the sterilization law and the free antitoxin law.

Senator M. M. McDonald, M.D., of Knox County, who was always on the right side of all medical and also other advanced and good measures.

Representative Charles E. Scholl, M.D., of Carroll County, was also one of our efficient and faithful workers for all measures affecting the public good.

Representative A. M. Porter, M.D., of Martin County, was the chairman of the Committee on State Medicine, Health and Vital Statistics. He was always to be found on the firing line, and his work is a credit to the profession.

The war against transmissible diseases carried on by the State Board of Health has been effective, for the statistics show a marked decrease in diphtheria, scarlet fever and typhoid fever, the three enemies that have been so persistently attacked.

The food and drug and bacteriological and pathological departments of the State Board of Health, with their efficiently manned laboratories, have done most excellent work. Whereas, in 1906, the year of the opening of the laboratories, it was found that 64 per cent. of all food and drug samples examined were either adulterated or below standard, now less than 15 per cent. are so found. This great improvement of 49 per cent., representing an enormous saving to the people, has been secured by rigid and honest enforcement of the law. The bacteriological and pathological laboratory is now known throughout the entire state for its accurate examina-

tions, and the profession in every county seeks its gratuitous aid in the good work of relieving human suffering. We are, indeed, to be congratulated in the matter of our State Board of Health, which in a little over one decade has achieved an international reputation.

The doctor should be a force for the clean, plain, moral life of his community. He more than all others can influence the lives of his clientele, and thus his opportunities and responsibilities are inseparable. Too often there is something mawkish and disagreeable about the generally accepted teaching of morality. But the morality of science, while in accord with that of the church, is alive, alert, buoyant with joy, and springing, as it does, from the plainest lessons of human experience, bears the indisputable evidence of enlightened common sense.

The doctor should lead his fellow-men. The service which he alone can render them can be adequately done only when inspired by a love of mankind, illuminated by the light which science sheds.

A great writer once said: "There exists in society three men who never can possibly esteem the world. They are the priest, the doctor and the lawyer; they wear black, perhaps, because they are in mourning for all the virtues and for all the illusions." It can scarcely be doubted that the doctor sees more, hears more, and knows more about the dark side of humanity than any other profession; in fact, than all other professions. He, as it were, is behind the scenes and sees the make-up of the actor. He knows men as they are, their weaknesses, and their strength, their follies, their vices and their virtues, their cowardice and often their heroism. He learns to love humanity because of its very weakness and delights in serving it because of its great need. The one great lesson which our work teaches, and which we would all do well to learn young, is that happiness and success consist in serving others; in giving, not getting. He is the best physician and the happiest and most useful man who renders the most service. Hard work, plain living, high thinking, a sympathetic pity for the follies of men, a chivalric charity for the weaknesses of women, a buoyant, helpful, hopeful, cheerful, clean personality—these will go far toward inspiring in the minds of others that biologic ethics which we call right living, and will make us a factor in bringing about a healthy conception of life and further the cause of the moral evolution of the race.

INTESTINAL AUTOINTOXICATION AND ITS TREATMENT.*

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Intestinal autointoxication as a morbid condition was first markedly emphasized by Bouchard and later by his many followers. Its true importance is still unknown, but it is safe to affirm that it has not received the degree of practical consideration from the profession at large that it deserves.

Enterogenous autointoxication is not denoted by a definite set of pathologic or clinical phenomena, and our positive knowledge concerning its exact causation and of the chemistry involved in the morbid process is also decidedly imperfect. The fact that the concept of different clinicians in recent times, regarding the nature and importance of this condition, has been widely different, may account for the slow progress toward scientific accuracy in its study.

Intestinal autointoxication not being recognized as a disease entity, it has not been seriously considered by the great bulk of the medical profession. On the other hand, further study of the subject in the spirit of intelligent research, observation and experience is greatly to be desired. Although its pathogenesis is imperfectly understood, it may be safely assumed that when the absorbable, intestinal, toxic substances—leukomains and ptomains—resulting from normal digestion are formed in abnormal amount, autointoxication occurs.

Chemical investigation has shown that oftentimes disease is attributable not so much to microbic action as to the products of intestinal fermentation and putrefaction. As well said by Field,¹ "Digestion, too, while it transforms albuminoid substances into peptones, also gives birth to alkaloidal poisons and, lastly, toxic substances derived from intestinal putrefaction."

Entering into the generation of an excess of these toxic bodies are three main factors: first, ingestion of too large quantities of albuminous foods; second, certain intestinal lesions, including defective motility brought about in a great variety of ways, and, third, abnormalities of metabolism. From recent personal experience and observation, the writer is convinced that fat

and sugar, taken in quantities above the physiologic capacity of the organism, are also responsible in certain cases, at least.

Before considering the local etiologic conditions (which may be acute or chronic) in detail, it is well to recollect that certain protective bodily functions are operative, with a view to overcoming the deleterious effects of the toxins already taken up from the intestinal tract. Thus, their elimination is effected, in a measure at least, by the functional activity of the kidneys, skin and liver (the so-called "filtering function"), as well as that of the respiratory and digestive tracts. It is obvious that defective renal, hepatic and cutaneous function may predispose to intestinal autoinfection in the presence of a moderate quantity of toxic bodies. It follows, as will be seen hereafter, that the eliminative processes are to be stimulated in the treatment of the condition, and it is, in a measure, by reason of the therapeutic results obtained in accordance with this view that we are justified in assuming the dependency of symptoms upon intestinal toxemia. On the contrary, and more significant clinically, are the functional and organic disturbances produced by the intestinal toxins in the various excretory tissues and organs of the body.

It must be emphasized that to not a single one of the poisonous intestinal toxins—or a special group of toxins even—are the clinical feature, which they originate, ascribable. This statement rests on the results of the combined efforts of many careful investigators, among whom may be mentioned Eisching, Groyer, Alonzo Taylor, Edsall and de Schweinitz, Kraus and others. But, though nothing definite is known in regard to the nature of the poison, in general, it may be safely assumed that insufficiency of the physiologic processes involved in nutrition, may be an essential underlying prerequisite. It is especially worthy of emphasis that alimentary intoxication originates only from certain elements of food in the presence of abnormal states of metabolism. Finkelstein² pertinently remarks: "The symptom-complex in the adult which we call autointoxication and ascribe to intestinal toxins may be due in reality to the pathologic fate of certain elements of the food (e. g., fat, sugar) in the intermediate metabolism."

This observer gives typical tracings and clinical histories to show the importance of the therapeutic results obtained by treatment of infants on dietetic principles. The alimentary intoxication can be made to appear, vanish and reappear at

* An address delivered before the Indiana State Medical Association, June 19, 1908.

1. Virginia Medical Semi-Monthly, Nov. 10, 1905.

2. Jahrbuch f. Kinderheilkunde, Berlin, last indexed, page 1306.

will by changing the diet; his experience also teaches that certain febrile conditions, suggesting typhoid or cholera, are solely and exclusively dependent on alimentary influences. The clinical picture of intestinal autointoxication in children differs materially from that met with in the adult, and it can not receive further attention here.

Kohlbrugge points out that under normal conditions the small intestine may not contain any bacteria, so that the putrefactive changes which occur take place principally in the large intestine or colon. Obviously, if the colonic contents be not systematically removed, an increased amount of toxins will be the result.

Under conditions of health, certain autotoxins are present within the body, but these are dealt with successfully by the eliminative organs or rendered harmless by certain antitoxins excited by them in the circulating blood. On the other hand, "under abnormal conditions and in the presence of the failure in action of the inhibitory processes, the injurious and toxic action of the imperfectly oxidized products of metabolism is evident; in other words, autointoxication of the organism" (Albu).

It is manifestly confusing and unscientific to classify, as has been done by Bouchard, Schwalbe and others, among the autointoxications all of the infectious diseases. Chapman³ wisely remarks: "Specific infectious diseases must not be included with autointoxications; only substances which originate in, or are elaborated within, the system should be regarded as causing autointoxications. Thus, mussel or sausage poisoning is a different process from intestinal putrefaction in which poisonous diamins are formed within the bowel lumen. In other words, autointoxication must not be confounded with autoinfection."

Intestinal autointoxication, however, has been slowly rising in the scale of abnormal states demanding recognition and judicious treatment. Recent investigations have extended our knowledge of the class of substances known as toxins, which are generated within the body, and in this connection Weichardt's observation and deduction are of profound interest to the physiologist and clinician concerning the "Ermudungstoxin" (fatigue-toxin).

Weichardt⁴ found that from the muscles of animals in a state of extreme fatigue can be prepared a toxin which is characterized by its specific action upon the animal organism. When

small animals are injected with quantities somewhat less than the fatal dose, the respiration becomes retarded and the temperature depressed, while the fatal dose itself produces death after a relatively short period of latency. When injected in doses too small to produce the toxic effect upon the cells, it renders the animal immune, and from the blood serum of such an immunized animal the corresponding antitoxin can be obtained."

A pure fatigue-toxin was also obtained from certain vegetable substances and by the action of oxidizing agents of a chemical nature upon albumins, or by the electrolysis of albumin solutions.

Whilst we can not ascribe any specificity of action recognizable by definite clinical symptoms, to the toxin taken up by the intestinal tract, yet it is definitely known that they are derived mainly from the albuminous substances previously ingested by the individual. It is not one of the points of this paper to show that the toxic bodies formed during the digestive process are similar in their physiologic or pathologic significance to the so-called fatigue-toxin, but rather to present the subject of toxins formed within organized bodies in a somewhat broadened aspect.

The present theme has no reference to certain other recognized forms of autointoxication. For example, that due to general abnormalities of metabolism or autointoxication caused by disappearance of the function of an organ, as in myxedema, Addison's disease and the like. Again, the subject of the relation of enterogenous autointoxication to diseases of organs representing certain specialties (e. g., ophthalmology, otology, gynecology and the like) does not concern the present discussion.⁵ As previously intimated, however, the form of autointoxication under consideration can not be disassociated from the toxic phenomena induced by retention of physiological products of metabolism, as in uremia, although in the majority of instances it is doubtless caused by certain poisonous products resulting more directly from an excess of albuminous food. It must be confessed, however, that the precise end product in the process of proteid metabolism on which the chronic autointoxication is dependent is as yet unknown.

In summarizing the known etiologic factors, I would assign conspicuous positions to the following in the order given: 1. Impaired metabolic processes; 2. errors of diet, or the ingestion of too large a quantity of proteids, and, although less

3. "Autointoxication as a Cause and Complication of Disease," Fiske Fund Prize Essay, page 9.

4. National Druggist, St. Louis, February, 1908.

5. The reader may, if he so desires, consult "Autointoxication in Relation to the Eye," by G. E. de Schweinitz, M.D., Journal of the American Medical Association, Feb. 9, 1907.

commonly of fats and sugars; 3, constipation; 4, intestinal pathologic states, as chronic appendicitis, mucous colitis and gastropsis with or without coloptosis. Maytum⁶ states that autointoxication has an influence in almost all, if not all, diseases. In most instances, however, this is subordinate and probably exerts no controlling influence over the course of the diseases to which it is secondary; in others, more particularly in protracted forms of the acute infections (e. g., typhoid fever), it may exert a telling effect upon the symptoms and issue.

From an etiologic standpoint, the cases should be subdivided, according to their origin, into gastric and intestinal forms of chronic autointoxication. The gastric variety is caused by pyloric obstruction followed by marked motor insufficiency, with stagnation of the stomach contents. The great majority of the cases, however, are of intestinal origin: the peptones, as is well known, pass into the intestinal canal and if the natural metamorphosis does not take place within the physiologic time limit, then putrefactive fermentative changes set in with resulting poisonous products.

The subject of chronic intestinal autointoxication from a chemical point of view has been concisely and clearly stated by Forchheimer⁷ as follows: "The changes in these two substances (albumin and nuclein) are the result of the activity of enzymes or of bacterias. The substances produced by enzymes are albumoses from albumin and the xanthin bases and uric acid from nuclein. In both instances pancreatic digestion is the principal cause. The action of bacteria manifests itself only upon albumin, as far as we know, in the form of pancreatic putridity and the bacterial processes which go on in the colon. The substances which result from this process and which interest us are phenol and indol, Brieger having shown that the rest of the bodies formed during putridity of albumin are little toxic.

"It has been shown that some of the albumoses formed during digestion are toxic, that is, when injected into lower animals. Of the purin bodies, xanthin, hypoxanthin, paraxanthin, hetroxanthin and adenin have also been shown to be toxic. Uric acid is toxic in a certain sense only; when it is injected into animals in large quantities no toxic symptoms are produced, but local symptoms may result under favorable circumstances. Both phenol and indol are toxic; in the lower animals indol produces decided symptoms (Herter); as the production of phenol and indol usually go

hand in hand, the determination of one is sufficient for clinical purposes in order to determine the amount of putridity in the intestine."

Symptoms.—No single characteristic grouping of features is presented by this condition. Gastric symptoms are among the most common clinical manifestations, but their explanation offers marked difficulties. Doubtless they are often dependent upon primary affections of the stomach, in which cases they would act as accessory causes of the intoxication. Krehl has shown that in gastric conditions accompanied by diminished HCl, the tendency to putrefactive intestinal changes is facilitated. Conversely, an excess of HCl in the stomach contents may be noted in some cases. Further investigation may reveal the exact relationship that exists between these gastric phenomena and chronic intestinal intoxication, while our positive knowledge at date of writing does not permit of a clear discrimination of those that enter into the causation of the condition from those that belong to its symptomatology.

Forchheimer suggests the possibility that various substances formed in the colon may be eliminated into the stomach and there produce either functional or organic disturbance. The cases accompanied by dyspeptic and other gastric features will display a coated tongue with more or less fetor of breath, and the intimate and common association of chronic intestinal autointoxication and Rigg's disease (pyorrhea alveolaris) have been emphasized by certain writers.

Constipation is among the commonest features of alimentary intoxication. In the case of constipation, there is a discoverable element of causative relationship, and this symptom, as will be shown hereafter, presents one of the most important indications for appropriate treatment. Constipation may alternate with diarrhea, while in others mere irregularity of bowel action exists. A careful physical examination of the colon, more particularly by light percussion, will indicate the presence of an overfilled condition of the bowel, most commonly in its descending portion. Palpation may detect a doughy mass or masses in one or more sections of the colon, and after removal of these fecal accumulations more or less thickening of the intestinal walls due to a catarrhal state with infiltration may be detectable. In the individual case, therefore, the copremia may originate similarly with each recurrence, the lesions mentioned above inhibiting peristalsis in a given portion of the colonic mucous membrane. The gastrointestinal symptoms thus far described are often found to be secondary to certain intes-

6. Northwestern Lancet, Jan. 15, 1908.

7. The American Journal of the Medical Sciences, July, 1907.

tinal conditions, e. g., mucous colitis, chronic appendicitis, gastropotosis and the like.

There are cases in which old fecal accumulations, usually occupying the ascending portion of the colon or the neighborhood of the sigmoid, are accompanied by fluid stools, ranging from one to several in number daily. Here the autotoxic manifestations may be mild in character and evidenced by an occasional headache and so-called bilious attacks. Occupation has not been shown to have any etiologic significance, as some writers have supposed. The metabolic anomalies in association with intestinal putrefaction and stagnation manifest constantly an inordinate excretion of alimentary decomposition products in the urine.

Brunon and Guerbet,⁸ from their exceptional studies, have formulated the following conclusions: "1. The coefficient of intestinal fermentation is the relation of the ethereal sulphates of the urine to 100 parts of total urinary nitrogen estimated in SO_3 . 2. As a result of experiments made by one of the authors on healthy individuals, this coefficient is often less than 1 and never passes 1.4. Diets such as milk, vegetarian, mixed or meat, do not affect this result. 3. On the other hand, in patients in whom one suspects hepatic or renal insufficiency (except in the case of uremia, in which it tends to be depressed), this coefficient may serve to measure the degree of alimentary intoxication. It exceeds 1.4 and may reach a very high figure. In their observations this elevation of the coefficient almost always coincided with a slight albuminuria. 4. The diet has a very marked effect on the coefficient; the vegetarian or milk diet associated with absorption of lactic acid ferments lowers it. 5. Clinical improvement has always been observed in these cases. 6. The determination of the coefficient of intestinal fermentation is a simple clinical procedure. This coefficient is capable of giving the physician useful practical indications for diagnosis, prognosis and dietetic treatment."

My personal experience and observation indicated an increase in the elimination of indican in practically all cases; this is in consonance with the observations of most writers, and I have further demonstrated the fact to my own satisfaction that indican is increased most decidedly in the cases showing marked accumulations throughout the colon. It is obvious that in direct proportion to the renal elimination of indican will be raised the autoprotective power of the human

organism. On the other hand, its disappearance from the urine does not impair the protective processes, but points to a subsidence of the putrefactive fermentative changes in the intestine. Obviously this urinary constituent becomes of the utmost importance for both diagnostic and prognostic purposes, and chemical examination of the urine for its presence or absence can not, therefore, be considered too tedious for the general practitioner.

The microscopic urinary findings are unimportant, the principal ones being calcium oxalate crystals and hyaline and faintly granular casts. Chemically the urine has rarely shown any morphologic elements, except that the uric acid has been generally found to be increased. I have never observed albuminuria in cases not complicated with chronic nephritis. Among urinary phenomena stand out prominently the marked variation in the 24-hour quantity; and the specific gravity may not bear an inverse ratio to the daily output, but conversely is sometimes unusually high, despite an increased daily amount.

I have observed marked acetonuria in a preponderating proportion of my cases of chronic autointoxication of intestinal origin. This finding is indicative of impairment of the intermediate metabolic processes, the indol and hypoxanthin bases being imperfectly assimilated, leading to acidosis.

The nervous system, more particularly the vasomotor tract, is decidedly affected by the irritant autotoxins. It is exceedingly important, however, to distinguish between nervous disturbances induced by the absorbed toxic substances and those resulting from primary changes in the neuro-mechanism of the body. Before classifying the given disease as being autogenetic or enterogenous, an attempt should be made to positively exclude organic visceral and nervous diseases. On the other hand, it will be found impossible to discriminate the commoner forms of neurasthenia (due to fatigue-toxins from overwork) from those in which intestinal autointoxication is the point of departure. Due to the toxins circulating in the blood (acidosis) the alkalinity of the nerve envelops is decidedly impaired, with resulting nervous manifestations, principally neurasthenic and hysterical. I would caution my hearers against the fallacy of making an assured diagnosis of either autotoxic hysteria or neurasthenia without clear and convincing evidences of the presence of the etiologic conditions. For whilst the influence of intestinal autointoxication in the causation of neurasthenia is undoubted, the majority of cases of the latter condi-

⁸ S. Presse Medicale, Paris; Journal of the A. M. A., Sept. 7, 1907.

tion do not bear the stamp of an enterogenous toxicosis.

De Vries⁹ has emphasized the psychic phenomena of intestinal autointoxication, which he attributes quite generally to the result of long continued constipation. These are depression, dread, fear, nostalgia, melancholia, delusions and the like. It is to be recollected that, although sometimes a previously existing intestinal intoxication appears to be an underlying cause for an exacerbation of psychic symptoms, such as described above, there are other and more common exciting factors recognized for the same phenomena. According to the writer's experience, the particular grouping of nervous manifestations seeming to be most prominent are a feeling of languor, marked lassitude, loss of physical and mental energy, vertigo, insomnia, drowsiness, irritability and occasional headaches. Various motor and sensory disturbances are also encountered.

The autotoxic cutaneous conditions sometimes met with are erythema, urticaria, eczema and acne. In close clinical union with the skin conditions dependent upon autointoxication of intestinal origin are gouty or rheumatic joints and muscular rheumatism, as well as indicanuria. In an interesting case of my own in which the intestinal features were practically constant or chronic in their course, exacerbations occurred at irregular intervals, characterized by nausea and vomiting (at times), fever ranging from 101 to 103 F., and defervescing by lysis, either urticaria or erythema with multiple arthritis (without migration) resembling acute or subacute articular rheumatism. Such attacks often follow flagrant errors of diet, as in the case just referred to. Among the cardio-vascular concomitants, special mention should be made of neurosis and generalized arterial sclerosis with secondary myocardial degeneration. Instances of chronic myocarditis may be encountered in symptomatic connection with enterogenous autointoxication, but it is not clear that the latter condition is the sole cause for the former. Unquestionably, certain cardiac neuroses, such as attacks of palpitation, tachycardia and various forms of arrhythmia, may owe their origin to toxic absorption from the intestinal tract. The same causative influence habitually maintained exerts a potent effect in the development of arterial sclerosis.

Obviously, depending upon the individual's susceptibility, it may be months or years before the first indications of sclerosis of the vessels ap-

pear, and associated etiologic factors are commonly soon or late in evidence. The intestinal autotoxemia admittedly leads to the development of purin bodies, including uric acid, which, in turn, are potent in the production of sclerotic changes in the vascular system. During exacerbations in the course of enterogenous autointoxication, I frequently have been able to satisfy myself of the presence of marked vaso-constriction of the peripheral blood vessels, presumably the resultant action of the toxic substances absorbed from the intestines upon the intima of the vessels.

There is no more difficult problem in medical diagnosis than the positive recognition of chronic intestinal autointoxication. The diagnosis of this condition should always be made with much caution and reserve, after careful consideration of the anamnesis and a judicious balancing of all data bearing upon the case. If there be present any recognized acute or chronic affection, the diagnosis of primary enterogenous autointoxication is precluded. It is not permissible to regard the given case as one of chronic alimentary intoxication, retrospectively, merely because the symptoms have disappeared as the result of an eliminative plan of treatment, since this method also serves to remove other disposing and exciting causes. In connection with the principal causative factors, the following symptom group would suffice for an assured diagnosis: heavily coated tongue, fetor of breath, often indications of Rigg's disease, headache at intervals, constipation, evidence of fecal accumulation in the colon, the elimination of an increased amount of indican and (commonly) acetoneuria, showing impairment of intermediate metabolism. Less characteristic, perhaps, although strongly confirmatory, are the nervous manifestations and the associated febrile, arthritic and cutaneous conditions previously described.

From personal experience and observation in a considerable number of cases, the writer feels that it is imperative to draw a practical distinction between primary chronic autointoxication of intestinal origin and that form which occurs secondary to other acute and chronic diseases. In the latter variety, which is decidedly more common than the former, the alimentary autointoxication is sufficiently open to observation to be recognizable, and it requires attention, but is not to be regarded as the principal disease.

Treatment.—The prophylaxis of enterogenous autointoxication must embrace first and foremost a consideration of all known etiologic factors. With a view to diminishing further formation of

9. "Psychic Phenomena of Intestinal Auto-intoxication and Their Treatment," by J. C. De Vries, Military Surgeon, Carlisle, January, 1908.

toxins, the diet must be carefully arranged, as a rule. The quantity of unsuitable food which may vary in different cases must be excluded from the dietary. For example, I have observed instances in which the carbohydrates (sugar, starch) were to be principally eliminated, although in a preponderance of the cases the proteids in abnormal amount were potent in exciting the fermentative and putrefactive processes.

In the acute form of intestinal autointoxication, a marked, temporary restriction of diet, even to fluids alone, is advisable. During the acute exacerbations in the course of chronic intestinal autointoxication, especially in that form characterized by so-called bilious attacks, accompanied with headache (migraine), the diet should be regulated in accordance with the indications for the intestinal condition, not as to the cephalalgia. I have found that absolute abstemiousness from food for a period of twenty-four hours meets the requirements of this group of cases from an alimentary viewpoint.

In general, to meet the demands of nutrition in the chronic forms and at the same time minimize the production of intestinal toxins, the lighter and more digestible albuminoids, such as milk, eggs, fish, oysters, fowl (except turkey) and game (in season)—all in moderate quantity—in combination with wholesome fruits, green vegetables, cereals, potatoes, either mashed or baked, and a small amount of fat and sugar, forms the bases of an appropriate dietary. In the secondary form, the diet is to be formulated with reference particularly to the primary affection, and if rightly adjusted tends to mitigate or even remove the cause of the secondary condition.

Tea and coffee should be replaced by milk, cocoa and hot water as beverages. Alcohol of all forms must be used cautiously, and when, as sometimes happens, it causes ill effects, its total exclusion is imperative. A small amount of light acid wine, as claret or Rhine, aids in keeping the patient in a good state of nutrition and may be ordinarily recommended unless special contra-indications exist.

The second leading indication is to empty the bowels by the use of laxatives possessing antiseptic properties, of which the most useful are calomel and the salines. It is my custom to prescribe a course of calomel at the beginning and later at varying intervals of time according to the degree of intensity of the local phenomena. Each course of this remedy is followed by a saline laxative, such as the phosphate of sodium dissolved in hot water while fasting, and it is continued daily so long as the indications, as shown by the condi-

tion of the stomach, the character of the dejecta and urinary findings, persist.

Certain of the so-called alkaline-saline mineral waters which owe their superior therapeutic value principally to the presence of sodium, calcium and magnesium sulphate, together with a smaller percentage of sodium chlorid, and the carbonates, are also decidedly efficacious. Such waters are to be found at Carlsbad, Aix les Bains, Homburg, Baden, Weishaden and other springs abroad, as well as at certain spas at home. Not all cases, however, need to be sent to resorts, but only the more severe and protracted ones. In the majority of instances, home treatment, including the use of saline mineral waters or salts made from them, may be successfully employed. They should be administered on rising and hot.

In intractable forms, colonic irrigation with various antiseptic solutions given in the usual manner should be advised and encouraged. In no other way can the mucous membrane of the colon and rectum be so quickly and thoroughly cleansed. These high enemata should be administered at regular intervals of from 24 to 48 hours and their temperature should be not less than 100° F. For the fecal impaction when etiologically associated with autointoxication, it is best to give a small hypodermatic injection of morphin (gr. 1/16) and then to administer eserine (gr. 1/80) every four hours until the desired result is produced, or, failing to obtain relief thereby, high enemata, copious, and regularly repeated, containing ox-gall and magnesium sulphate, may be tried.

Further elimination of the toxic substances is to be secured by stimulating the action of the sweat glands. Among favored means to accomplish this purpose are the hot water baths and the electric, Russian or Turkish baths. I am clearly of the opinion that it is preferable, although not an absolute necessity, for the application of hydropathic measures to send the patient to some well-regulated institute.

Perhaps the chief channel of elimination is the urinary tract, and present-day professional opinion in regard to meeting this indication may be formulated by saying that the best diuretic is plenty of water. The use of mineral waters that tend to stimulate kidney secretion is also to be encouraged and advised. My own best results have followed the use of either Poland water or one of the feebler lithia waters. These are to be taken in large amounts, and my rule has been to allow three liters per diem in divided portions at stated intervals. In cases in which there is cardiac insufficiency with lowered arterial tension,

cardiac stimulants, e. g., digitalis, strophanthus and the like, may be employed with a view to raising the vascular tension and thus aiding the filtration of water through the kidneys.

Stern¹⁰ emphasizes the value of enteroclysis of large amounts (from 4 to 8 liters of 0.6 per cent. sodium chlorid solution), hypodermoclysis and intravenous injection of sodium chlorid solutions for the production of free diuresis. This method should be brought into requisition only in case of failure of the means advocated above.

An important item of treatment remains to be considered, to wit: physical exercises or suitable manual work which is useful in promoting the general metabolism, improving the digestive function, stimulating the respiratory function and hastening elimination by the cutaneous and other routes. Another possible effect of exercise is the direct oxidation of the intestinal toxins. The form of the exercise and also the time and frequency must be adjudged for individual cases. In all cases, however, muscular activity must be carried forward systematically and should be encouraged in the open air. In cases in which adequate physical exertion is unsuitable, I would advise the judicious employment of massage supplemented by various forms of Swedish movements.

After preventing the ingestion of an excessive quantity of food, it is customary to prescribe intestinal antiseptics. Trite though this recommendation may seem, and obviously of secondary importance as compared with the combating of causes, I have nevertheless observed manifest improvement from their use in cases attended with marked meteorism. From efficient doses of charcoal and benzonaphthol given in combination with extract of pancreatin and pepsin, the best and speediest benefits may be expected. For the prevention of the putrefactive changes, HCl well diluted after food has proved serviceable in my hands. It has been recommended to employ only such agents as are soluble in the intestinal tract. Forchheimer advises the use of the so-called intestinal pill, i. e., one in which the coating is dissolved only in alkaline medium. Waldstein's method of preparing these pills, which usually contain either menthol, thymol or β -naphthol, is to coat them with an alcoholic solution of shellac containing salol (salol-coated pills).

It is not the object of the present paper to discuss the treatment of the various conditions and diseases to which chronic intestinal autointoxication may be secondary. In this large group of cases, however, an attempt should be made to pre-

vent further poisoning with ptomaines and leukomaines, to promote elimination and meet symptoms as they arise, provided always that in so doing the aims and objects of the treatment of the primary disease is not controverted thereby.

THE OPPORTUNITY FOR WORK, PROGRESS AND PEACE.*

W. N. WISHARD, M.D.

INDIANAPOLIS, IND.

It is estimated that the number of students who are citizens of Indiana and who annually seek a medical education, and who have a right to look for ample educational opportunity within the boundaries of their own state, is between 600 and 700. At least half have heretofore attended medical schools located outside of this state. The total number doubtless will and should diminish relatively as educational requirements become more exacting. And yet there will still be many more than the total number of those who now and who heretofore have constituted the entire student body of the different medical schools in this commonwealth. The causes of this in the past have been various, but the duty of those who are charged with the responsibility of medical education in Indiana in the future, it seems to me, is clear. It is not difficult to discover the influences which have in the past led so many medical students to go outside the borders of their own state and which will hereafter inevitably influence, may we not hope, a diminishing number to do the same thing. It may not be unprofitable, however, to consider some of these influences.

Among them may be recognized incidentally the usual individual factors which determine the choice of a particular educational institution of any kind, such as the fact that a relative or friend may have attended the school selected or that some especial circumstance or influence may have been operative. But more important and fundamental reasons must be conceded in explanation of the remarkably large per cent. of those who have gone to medical schools elsewhere.

The fact is too patent to be questioned that medical schools in this state have been laboring under disadvantages that have made the highest success impossible. Very naturally students who have collegiate training and who have also ample financial resources will seek the medical schools possessing the best equipment taken as a whole.

* Toast Responded to by Dr. W. N. Wishard at the Alumni Meeting of the Indiana University Medical School at the Grand Hotel, Indianapolis, Ind., May 23, 1908.

The answer to the financial and administrative handicap which has restricted the noble efforts of those who have sought to elevate the standard of medical education in Indiana and in other states in the past is found in the one word, University. There has been no lack of unity of opinion as to what constituted the remedy, but there has been an honest and somewhat radical difference of opinion as to its application. The solution has happily been found in an agreement which, although possibly questioned by some who entertain opposite views, is, nevertheless, I believe, the very best possible solution of the situation. This solution is well expressed in the recently published statement over the signatures of the presidents of Indiana and Purdue universities. In saying that the best possible solution has been found, I am glad to quote the opinion of a distinguished ex-president of this university, Dr. David Starr Jordan, expressed in an interview some three years ago, when he said that he believed the plan which has now been adopted would be best calculated to meet medical educational necessities both for research work and the practical training of medical practitioners. As one who has been deeply interested in and somewhat actively identified with the recent events leading up to the present solution of this problem in Indiana, perhaps it may not be inappropriate for me to express the convictions which have been entertained by, and have influenced, a very large proportion of those having the liveliest interest in medical education. There has never been, so far as I am aware, anything but commendation of the course of the authorities of this university in undertaking and maintaining the excellent department now conducting the medical work of the freshman and sophomore years at Bloomington. In this the proper authorities have wisely recognized the necessity for such provision as an essential and integral part of university work. But there has been a widespread opinion that medical educational necessities require also that ample provision should be made for the first two years of laboratory work in direct connection with the last two years of clinical work. If it is the right of the state to define the educational qualifications which shall entitle a man or woman to enter the practice of medicine, it is also the duty of the state to make the broadest and most ample provision for obtaining medical training. Such provision can only be the broadest possible and the most ample which gives an elective opportunity to take laboratory and clinical work separately or in direct conjunction. Happily this opportunity is now afforded, and in both instances ample and

well-equipped laboratories are provided, each doing excellent and equally good work. There are many and satisfactory reasons for what might otherwise seem an unnecessary duplication of work. The future development of this school must necessarily include the early establishment of a postgraduate department for practitioners which, of necessity, must be in intimate relationship with the clinical part of the work done in the junior and senior years. In anticipation of the establishment of a postgraduate department ample provision for review and experimental laboratory work by physicians who now go elsewhere should be made. This larger and greater university opportunity which is now afforded is to me a most attractive one. Let us keep within our borders and provide ample facilities not only for these postgraduate students, and those who now seek the regular course already provided, but also the considerable number of graduates of non-state schools whose views of college loyalty and other reasons may heretofore have led them elsewhere.

Loyalty on the part of its alumni is an invaluable and absolutely essential asset of every college or university. Its helpful and supporting power in critical periods of an institution's career has many notable examples. Its influence upon the subsequent educational activities and associations of the individual is a matter of common knowledge. This is notably true in the selection of a professional school. Indiana University has had no more potent aid in her efforts to establish a medical department than the splendid support given by her graduates in every city and county from Lake Michigan to the Ohio. The opportunity happens to have been afforded some of us who have differed with her on certain matters in the past three or four years (which happily are no longer matters of controversy) to have had abundant evidence of the loyalty of the graduates of the state university. I have repeatedly expressed the highest admiration of this loyalty, however much I may at times have demurred at the particular direction it took. This loyalty has been shown cheerfully, heartily, earnestly. Doubtless in many, and possibly in the majority, of instances without especial interest in the particular incident that called for its display, but because their alma mater had sounded a call to her loyal sons and daughters to give her their needed assistance. What is true of Indiana University is true of DePauw, Wabash, Earlham, Notre Dame, Hanover, Franklin, and all other schools, both state and non-state. In the present solution of the medical problem in Indiana I am absolutely convinced that more has recently been

done to disarm any spirit of antagonism on the part of these institutions and their graduates than is generally realized. From the graduates of the combined colleges and universities of Indiana the student body of the Indiana University School of Medicine must in the future be chiefly drawn. The time is near at hand when a diploma from a licensed high school will no longer secure admission to an institution that is endowed with authority to confer a medical degree. In the future under the ample provision now assured there can and should be no reason why this school shall not receive the sympathetic support and achieve the splendid success which its obligation to all the citizens of the state demands of it as an educational institution and which every friend of medical education should desire for it. You will pardon a personal word in closing.

Some of you have done me the honor during "the late unpleasantness" to credit me with being a rather earnest opponent. I have fought for simply what I believed to be fundamental, and gave best assurance of permanency in building up a great medical school in Indiana. With others with whom I have been associated I have sought to attain that which I knew was nearest the hearts and received the sympathetic support and earnest approval of a great majority of the members of the medical profession in this state. The adjustment attained insures the endorsement of the profession, it guarantees elevation of the standard of medical education, and it will unquestionably increase the number of those who take the first two years' work at Bloomington, as well as at Indianapolis, and will by giving a complete course in medicine in the latter place afford opportunity for reference and review laboratory work in the junior and senior years, and by this dual and elective plan give certain assurance of the success which has been so notably attained at Cornell and elsewhere.

And now let us have peace and unity of effort. If anyone still entertains a lingering doubt that the desired end has really been attained, I am glad to say that his doubts are unfounded. On the night of April 4, 1908, at the joint conference of the official representatives of Indiana University, and Purdue University, and the Indiana Medical College, when the proposition of Indiana University was under consideration, I asked Hon. B. F. Shively, president of the board of trustees of Indiana University, a question to which he in his official capacity gave an emphatic affirmative reply, and to which President Bryan also gave an affirmative reply. The question asked was simply this: "Do you interpret the proposition which you

present to mean that you will not only assent to, but that you will honestly and earnestly work to secure legislative approval of a permanent four years' course in Indianapolis?" The cordial acceptance of this plan by the authorities of Indiana University should, and I believe most heartily does, bring peace and tranquility to medical educational efforts in Indiana. Let us justify this belief by united and harmonious effort.

RURAL AND VILLAGE HYGIENE.*

D. W. ROBERTSON, M.D.

DEPUTY, IND.

My title would indicate that there is a difference between urban and rural districts in this very important matter of the prevention of disease. It is true that while both wage warfare against the same foes, better methods are usually observed in the cities. Statistics indicate that fatal disease is less prevalent in the country, and this notwithstanding the carelessness observed in the enforcement of sanitary regulations there. Often we find no evidences that there are any regulations applying to rural districts except in such special cases as an outbreak of smallpox or other virulent contagion, and it is this lack of authority that constitutes the greatest defect in the present system. It now takes a regular procedure in the courts to suppress a too odoriferous pigpen situated in a village or unincorporated town. There is no autocrat there to demand instant cessation of such a nuisance and enforce the demand.

It is my belief that a little more paternalism is absolutely necessary if we are ever to accomplish much in these country places. This idea of independence that is bred and trained into Americans becomes pernicious when it leads men to object to any health regulation that entails personal loss. Avarice has fought against and interposed objections to almost every advance in sanitary methods.

The health conditions which many large cities attain by the exercise of constant vigilance are the natural inheritance of the country. It has been said by some one that "God made the country and man made the town," and when we compare the country and town from a sanitary standpoint we feel that we must subscribe to the sentiment so tersely expressed. The maintenance of the health of the people is the crowning function

* Read at the Fourth Councilor District Meeting at North Vernon, Ind., Oct. 23, 1906, and referred for publication in THE JOURNAL.

of government, but we Americans do not believe it, for while we have at Washington a department of agriculture and one of commerce, sanitation is not thought of sufficient importance to be similarly dignified.

Health is said to be 90 per cent. of capital, and if you don't believe it get the testimony of sick people and be convinced that it is true, and having been convinced do your best to spread the infection. Robert G. Ingersoll once sneeringly asked why God didn't make good health contagious instead of disease. The sanitarian makes answer that He does do so when He gets control of the boards of health.

If, then, the care of the health is of such great importance as I have averred, its custodians should be chosen only on the high ground of fitness. No "grafter" parading in the stolen uniform of a patriot should ever be entrusted with a duty so sacred as that of conserving the public health. Questions of life and death demand too much conscience to stay inside of politics unless the politics is strictly of the Folk-Hanly brand.

For many years men have been stumbling onto facts that have been of the greatest importance in prophylaxis, but the prevention of disease as a science is the product of a very recent time. The revelations of bacteriology alone made such a science possible. When I was a student of medicine, not so very long ago, I heard a revered teacher give voice to the prophecy that the time would come when physicians would be better paid for preventing disease than for curing it. The ideal, dimly perceived by him, is rapidly becoming a reality, and in no other department of medicine do such splendid opportunities for honorable distinction present themselves.

Medical students twenty years ago considered preventive medicine decorative rather than useful, but to-day it is a matter of pride to observe the achievements that have come along this line. As the world's most impressive example of this we have, unfortunately for our pride, to look away from America. The sanitary corps in the Japanese army operating in Manchuria in the recent war shamed us by the admirable work it did. Look at its record and then look at our own in the Spanish-American war and find cause for self-gratulation if you can. Organized responsibility resting definitely on some efficient and particular pair of shoulders was the secret of Japanese success, and the lack of it the explanation of our failure. Theirs was a demonstration to the world, second to none ever given, in practical prophylaxis.

Another conspicuous example in preventive medicine in which our own countrymen played a worthy part and earned the everlasting gratitude of the world is the story of Havana, which you all know so well. For many decades she was one of the plague spots of the tropics. Death sallied forth from her ports ravaging our coasts and invading our interior. But brave investigators established a definite etiology for yellow fever, and Havana is to-day, what it never was before in all its history, a clean and healthful city. To-day no terror writes itself in pallid and despairing faces at the bare mention of yellow fever, but the cases that come in from the Isthmus or other tropical points are conveyed, securely covered, to the general hospital and there treated rationally intelligently and humanely with small fear for infection. Thanks to the work of faithful and courageous men, it is no longer a foe in the dark. This writes itself a wonderful triumph for preventive medicine, but let us not forget that the addition of this truth to our art demanded struggles and sacrifice and martyrs, and the martyrs were there. By their sacrifice they added unnumbered centuries of happy life to humanity and demonstrated anew the fact, declared of old, that he who would be greatest among you must become the servant of all.

There are other problems, the correct solution of which means so much to the world. The construction of the Panama Canal is not a problem for the civil engineer primarily, but for the sanitarian. It presents some peculiar questions to him, and its completion finally will depend upon the answers he gives. But this is just one of the larger opportunities that are presenting and I only mention it to impress you with the importance of the general theme of prophylaxis.

The prevention of disease largely concerns itself with the questions of air, water, food, soil and personal habits. In the maintenance of healthy existence, pure air, pure water and pure food are essentials, but pure air is of first importance because of the necessity of a constant supply. Country air is generally pure on the outside of the houses, but on the inside, owing to faulty construction and bad management, it is often very noxious. Those abominations known as door strips are put up, the windows are tightly closed, the doors are shut and locked. Now add to this air-tight room an air-tight stove and, at night, to facilitate the giving of needed attention to a protesting first-born, add a lighted lamp, turned low, and you can see one of the methods by which the grandson of a pioneer, who

slept where night overtook him, and lived to get his second eyesight, slowly but surely suicides.

I have no doubt that many, if not all, of my brother physicians present have walked into a room similar to the one above described, say about 3 a. m. on a winter night, and if so it isn't necessary for me to punish language trying to make it convey a correct idea of how your olfactories resented the insult. The people who sleep in such rooms complain of a dark-brown taste, headaches, lassitude, and if they can not be induced to reform they soon wear pallid faces, have hectic flushes, habitual coughs and wasted bodies, and a later observation will very likely disclose a funeral cortege. This isn't a visitation of divine wrath; it isn't a case of disease contagion. It is simply a case of bad air.

Very often I find houses in which there is not a single room that is adapted to use as a sick chamber. Doors and windows so located that the room is draughty or else no chance for air. Transoms are so arranged that cold air comes into the room in a gale. Such rooms are an abomination. Often tragedies occur in them, for which the doctor stands more than an even chance of receiving the blame. Did time permit I could relate some painful personal experiences in proof of it, and I don't not that many of you could duplicate my experience.

The trouble with such buildings is faulty architecture, and it can only be remedied by popular education on sanitary questions. The proper place to begin this education is in the construction of our public buildings, and more especially in the construction of our schoolhouses, for there the most important years of life are spent, and certainly the very best is none too good for these embryo citizens.

The orator has learnedly and wordily referred to the little red schoolhouse as the palladium of our liberties. If it is to be a real safeguard to our liberties we ought to make it promote not only his mental activities and advancement, but we ought to see to it that it promotes as well his physical and moral well-being. We do this by building it to conform to the most approved plans. The schoolhouse ought to be a model in sanitary construction, but we know that it is exceptional to find one that is so. Usually the pupils are alternately freezing and suffocating; colds are engendered, throats become irritated and sore. A homeless bacillus of malignant type finds a location favorable for its growth, an epidemic is inaugurated, and perhaps some deaths occur, all because the heating and ventilation is defective.

Speaking of schools, I am reminded that while schoolrooms should be irreproachable from a sanitary point of view, the teacher himself should be in good health. It is really more important that he be well than that he should be competent to teach the principles of music, which I understand is now a requirement. No pity for the only daughter of a dependent mother should be a factor in securing for her a position as teacher if her health record is shady.

Especially should we guard against the employment of tuberculous teachers. I myself attended a school one of whose teachers, a consumptive, taught until within a few weeks of his death. Such a thing should now be impossible anywhere. Think of it, the dust in that recitation room held constantly in suspension, myriads of bacilli ready to implant themselves on any favorable location, such as a sore throat or irritated bronchial tubes. Those charged with the selection of teachers should bear in mind that *physical fitness* is primary in importance.

There are efforts being made to have competent medical supervision and inspection in the cities, but what shall we do in our country schools? Let us have more teaching of the principles upon which health depends. Pope well said that "the proper study of mankind is man." Let teacher and pupil study physical man together. Make the course in hygiene so full that the teacher will be competent to exercise all the more common functions of the sanitarian. Make it one of the specific duties of the teacher to care for the health of the children entrusted to his care. Certainly the surroundings in which a child is to pass the first years of its life should be conducive to perfect physical development.

The United States census report on vital statistics for 1900 shows that typhoid fever is much more prevalent in the country than in the cities. This is a severe arraignment, as the facilities for prevention are much greater in the country districts.

There are three important sources of typhoid infection: (1) Direct transfer from infected drinking vessels, eating raw fruit in sick room, and eating cold victuals; (2) through the mediation of the common housefly; (3) infected water and milk.

It is my belief that the fly is the most common infecting agent in country places, and prevention of typhoid depends largely on our ability to shut him out of our dwellings. Better give money to the hardware dealer for wire screening than to fee the doctor.

Every state board of health should specify the kind of closets and their proper care. Some one competent should be designated as health officer in every township, with power to act. Pigpens should be banished from towns and villages. In small villages the alley is often used for manure heaps, denised pet cats, tin cans and cholera-stricken chickens. Two pig styes often face each other across the narrow way, the wallows of which in mid-summer are filled with fetid mud. The odors which emanate from them on a warm summer night, when the air is heavy with moisture, are no reminders of Eden. I asked a county health officer to look at the landscape from which I drew the above picture. He came eighteen miles to see it with me, but when I asked him what I must do about it he said he had no authority to act. This was some years ago and I hope that ere this his powers have been extended.

What we need is more education along sanitary lines, good laws well enforced, and a realization by the people that prevention is better than cure. All these are needed to accelerate the tardy pace of the much talked-of but long overdue millenium. It is my belief that a card issued by the state board of health giving explicit directions for the proper construction of closets and the care of exeretia, distributed through county and township board to every physician for general use among the people, would be a very useful measure. The card might contain other items on household hygiene.

Speaking of closets reminds me that there ought to be public conveniences of this kind maintained by every incorporated town. A stranger in North Vernon to-day, if away from a hotel, is dependent upon the saloon for such accommodations. It ought not to be left for this parasite, that is the greatest menace to the physical and moral health of mankind, to do through motives of self-interest, the only motives that ever actuate it, what it is the duty of the municipality to do for the same reason. Every real sanitarian knows that we maintain and protect by our laws a greater nuisance in these same saloons than is afforded by foul air, pigpens, infected wells and adulterated food combined. John Burns, the great English labor leader, recently said: "Throughout the centuries the drink shop has been the antechamber to the asylum and the recruiting station for the hospital." His testimony agrees with your personal experience and observation, and with mine, and must, therefore, be true. And if it is the truth, the drink shop is a nuisance and should receive the treatment of a nuisance that is to be suppressed.

In conclusion I would say, let us work for a better and more effective sanitary law, one that extends effectively to the village and the country place. Let us fight for the systematic care of all human excrement and our air will be purer, our water better, typhoid rarer and life sweeter.

LOBAR PNEUMONIA: ITS PATHOLOGY AND TREATMENT.

H. T. MONTGOMERY, M.D.
SOUTH BEND, IND.

Lobar pneumonia is a very common disease, and one of much interest and concern to the general practitioner. It is a subject that is much written upon by those who are wise in medicine. We are carefully advised as to the plan of treatment, and warned against different lines of treatment and against the exhibition of various remedies. We are advised never to apply cold to the chest, as it reduces the vitality, nor hot applications, as they are conducive to suppuration. We are also advised not to administer aconite, as it weakens the heart and causes capillary stasis, and that opium should be withheld because it locks up the secretions and prevents expectoration. We are urged to carefully close the doors and windows to keep out the cold, as the difficulty originated from taking cold.

Then the drug nihilists speak up and tell us that drugs have no effect, that the disease is microbic and self-limiting, and that treatment is of no avail. And after we carefully follow these admonitions and various plans of treatment we get the usual death result, 18 to 25 per cent. double pneumonias dying and all but a few singles recovering.

It is now a generally accepted fact that lobar pneumonia is due to the toxin elaborated by the *Diplococcus lanceolatus* or the *Micrococcus pneumoniae*. It enters the lungs by inhalation and locates itself in the air vesicle, where, if the vitality has been reduced by exposure to extreme cold, or irritating gases or other substances calculated to produce slight congestion or the least solution of continuity, it becomes active, and of all pathogenic bacteria I think it the most prolific, as the prodromal period is the shortest.

The toxin being an irritant, an inflammatory process follows. A fibrous or plastic exudate is thrown out and the air vesicle and the bronchiole to the extent of about one-fifth of an inch is completely filled. This constitutes the entire anatomic pathologic lesion. In itself it constitutes no loss or destruction of tissue necessary to life,

and if death does not occur from toxemia, liquefaction and absorption follow, leaving the tissues in every way normal. The exudate in a lobar pneumonia never of itself suppurates, for it is always plastic.

Inflammatory exudates are always largely the same, their only difference being in the proportional quantity of the exudate constituency, which is liquor sanguineous, white and red corpuscles, with the cause-producing bacteria. Normal inflammatory exudates always coagulate and become plastic. But if the bacteria produce products which prevent coagulation, then it remains liquid, and we have a suppurative inflammation which destroys tissues and often ends in abscess.

In croupous pneumonia the exudate always coagulates, and consequently we have a plastic inflammation with no destruction of the parts. Why do patients die of pneumonia? Croupous pneumonia usually attacks one or two lobes of the same lung, and while it is confined to this area there is sufficient remaining aerated lung tissue to easily sustain life, and the patient always recovers unless the bacteria are extremely virulent and there is sufficient toxin elaborated to paralyze the cells of the life centers and produce death. We have then death from toxemia. But if the disease travels to the opposite lung and a part of that becomes inflamed and hepatized there is not sufficient healthy lung tissue remaining to properly aerate the blood and the patient dies of asphyxia. Hence, we have two modes or causes of death: first, from toxemia, and, second, from asphyxia. Few cases die of toxemia. Most cases of single pneumonia recover, most cases of double pneumonia die, and they die from asphyxia before the toxic products have time to bring about hematic conditions and cell destruction sufficient to cause death. The cases that die of toxemia are those cases of single pneumonia where one or two lobes are involved, with very decided objective symptoms, as weak, flabby muscles with consequent heart failure and distended abdomen, very high temperature and active delirium. This occurs when the conditions of the system and climatic conditions are most favorable for the growth and production of the microscopie vegetation which produces the peculiar pneumo-toxin. For this reason some seasons we have epidemics with great fatality, while other epidemics of the same disease are noted for their moderation.

If we expect to go further than mere symptomatic treatment, which is all that is offered to us in text-books, we must endeavor to hold the in-

flammatory action in abeyance, preventing, if possible, the involvement of a second lung and death by asphyxia. We must also endeavor to disorganize or neutralize the chemical product known as the toxin and render it inert. If these two objects can be accomplished, the death rate in pneumonia would be *nil*.

The physiologic processes in inflammation are the same in all tissues and in all parts of the body, and must be treated upon the same general principles. Shut off the blood supply. Cold-blooded or bloodless animals or bloodless tissues have no inflammation. They repair injury by cell proliferation.

Relieve the irritation at the nerve periphery or lock up the brain centers so that they can not receive it. It is the irritation transmitted to the brain that causes the increased blood supply or congestion. This can be done with opium and its derivatives. Then partially paralyze the heart so that it can not respond. This can be done positively with aconite. You can bring the pulse rate down to normal or below and reduce its volume. Apply moist heat to the thorax to soothe the nerve filaments and assist in allaying irritation.

You can not prevent the inflammation, from the fact that at your first visit the patient has had his initial chill and reaction has set in. The lung is in a high grade of inflammation and the blood full of toxin. But you can intelligently attempt to lower the inflammatory action and hold it to the tissues then involved. In other words, control the inflammation by allaying irritation, or render the brain centers unable to receive the impression caused by irritation, and slow or weaken the heart's action so that it can not force an increased amount of blood to the seat of irritation. Then administer agents, if there are any, that will chemically combine with the toxins and render them inert and also agents that act as germicides destroying the cause-producing organism. You will then have specific medication and something more than symptomatic treatment.

In the summer of 1881 I was called to see a young woman, 19 years old, who was suffering from general peritonitis originating from some masked pelvic disorder. The third day the pulse was 140, temperature ranging from 104½ to 105, abdomen highly distended and tympanitic, with active delirium. I concluded that she was going to die and advised counsel. They dispatched a messenger for Dr. Haggerty, of Elkhart, 17 miles away. We saw her about 6 o'clock that evening. The Doctor looked her over and said there was not much doubt about her dying.

and that he had nothing to suggest further than what I had been doing, but that he would give her 50 grains of quinin, as he had often seen that amount act promptly. I moistened 50 grains, making a tablespoonful of quinin dough or cream, and succeeded in getting the patient to swallow it. We returned home, and I saw the patient the next morning and found her temperature normal, her pulse 85 and mind clear. Her tympanitis slowly subsided and she made an uninterrupted recovery. The attendants informed me that "she sweat profusely all night."

The following winter Mr. C., of Wakarusa, in the western part of this county, contracted a facial erysipelas, involving the eyes and mucous membrane of the nostrils, and I believe became meningeal. His pulse was very rapid, temperature 105, and he became violently delirious, requiring four or five men continuously to restrain him, and making it very difficult to administer agents. About 9 o'clock in the evening of the third day I placed a temporary gag in his mouth and gave him a large tablespoonful of quinin dough. I saw him early the next morning and found his temperature nearly normal, pulse 90, delirium gone, and sleeping like a child. I gave him nothing more internally or externally. The swelling of the face and head rapidly disappeared and convalescence was established.

Many times since those years I have prescribed large doses of quinin with often very positive results, but I mention in detail the above cases as being my first experience with large doses of quinin and the striking results obtained.

In the *Journal of the A. M. A.* Dr. W. J. Galbraith of Sonora, Mexico, published an article on the quinin treatment of lobar pneumonia, in which he recommends the administration of 50 to 60 grains and follows it in two or three hours, if necessary, with doses of 20 to 40 grains. He also recommended the tincture of chlorid of iron in 10 to 15 m. doses every four hours, alternating it with 10 gr. doses of quinin. If the temperature does not fall, the general symptoms decidedly abate within six or eight hours, he repeats the large dose of quinin. With this line of treatment he has reduced his mortality to 2 per cent.

In the *Journal of the A. M. A.*, Nov. 18, 1905, Dr. C. F. Neider, Genoa, N. Y., publishes the results of three cases treated in the same manner, and one a double pneumonia, without a fatality.

In the *Journal of the A. M. A.*, Feb. 10, 1906, page 410, Dr. Galbraith presents another article detailing the history of twelve cases treated with the quinin method by other physicians in the same locality without fatality.

In the *Journal of the A. M. A.*, March 17, 1906, page 799, Dr. A. L. Gustetter, acting assistant surgeon U. S. Public Health and Marine-Hospital Service, Nogales, Ariz., hospital service, says: "Pneumonia is a very prevalent disease in Nogales and vicinity. My mortality in cases was formerly nearly 80 per cent. Thus far I have not had a death from pneumonia since I began the quinin treatment according to Dr. Galbraith's method."

In the *Journal of the A. M. A.*, July 28, 1906, page 272, Dr. Neider of Genoa, N. Y., reports twelve more cases treated by the quinin method with one death. The death occurred in a confirmed alcoholic who was previously suffering from pulmonary tuberculosis.

In the *Journal of the A. M. A.*, Jan. 12, 1907, page 131, Dr. M. A. B. Smith, professor of medicine in the Halifax Medical College, reports four cases treated by the quinin method, one a double pneumonia, with no fatality. He believes that quinin is as much a specific in pneumonia as antitoxin is in diphtheria. In a footnote to this article Dr. Smith refers to a communication from Dr. Galbraith in which he mentions that he has treated and had reported to him over 300 cases of pneumonia treated by the quinin method, with a mortality of 2 per cent.

My early experience with large doses of quinin, and knowing it to be a positive specific in malaria, I was easily led to follow Dr. Galbraith's teachings in reference to quinin in pneumonia. During the last year I have had but two cases of pure, unmixed cases of lobar pneumonia in which I could put the quinin treatment to a test. The cases are as follows:

CASE 1.—Patient C. H., aged 38, had severe chill July 17, 1906, followed by fever and pain in left lung. I first saw him July 19. Temperature 102.5, pulse 120, respirations 32, with profuse bloody sputa, an anxious expression and dull leaden countenance. Prescribed opium and aconite and omitted quinin from the fact that I had no quinin with me and patient lived nine miles in the country. July 20, 9 a. m., temperature 102, pulse 118, respirations 30, with pain and hepatization developed in lower part of right lung, saturating clothes with rusty sputum. Gave him 32 grains of quinin, and 16 more in one hour, and ordered 8 grains every four hours, alternating with 8 minims of tincture chlorid iron. July 21, 4 p. m., temperature 102, pulse 112, respirations easier and patient feeling more comfortable. Gave 32 grains of quinin and followed in one hour by 16 more, and continued routine quinin and iron. Left instructions that he be given 32 grains of quinin at 9 a. m. the next morning. July 22, 5 p. m., temperature 99.2.

pulse 80, pain gone and sputum rapidly disappearing. Continued quinin and iron every four hours. July 23, 4 p. m., temperature 100, pulse 72, respiration 30. With this slight increase of temperature and rapid respiration I felt warranted in giving him 24 grains of quinin. July 24, 4 p. m., temperature 98.6, pulse 68, respiration 28, patient sitting up fanning himself. The rapid breathing was due to the remaining hepatisation without inflammation. He had no further inflammatory action, but it required about a week to complete resolution.

Gentlemen, this was the first case of double pneumonia, during thirty-two years, that I treated to a successful termination.

CASE 2.—Patient W. L., aged 24, severe chill the evening of February 2, followed by fever, cough and pain in right lung during the night. Saw him February 3 at 12 m.: temperature 103.5, pulse 120, respiration 36, with copious rusty sputum. Gave him 48 grains of quinin, and ordered 8 grains every four hours, and 12 minims of tincture chlorid of iron alternation. February 4, 9 a. m., temperature 103, pulse 114, respiration 30, no pain, feeling comfortable and rusty sputa rapidly disappearing. Gave him 48 grains quinin and continued routine. Saw him at 5 p. m., temperature 101.2, pulse 105, respiration 28, no sputum. Continued routine quinin and iron. February 5, temperature 99, pulse 76, respiration 22. Ordered 4 grains quinin every four hours and continued the iron. February 7, found him dressed and about the house, apparently in normal condition. This was five days from initial chill.

Dr. Bosenbury of our city also had the courage to try the quinin treatment in four cases, and kindly gave me an opportunity to see them several times during their progress, and has furnished this history:

CASE 1.—C. C., aged 21; called to see him March 27, 1906; temperature 103, pulse 120, respiration 30, severe pain in right chest. March 28, temperature 104, pulse 120, respiration 32, profuse rusty sputa and increased pain. March 29, 4 p. m., temperature 104.4, pulse 110, respiration 40, continued severe pain. With fear and trembling, 50 grains of quinin were given and 5 grains every two hours thereafter, also 10 m. of tincture chlorid every four hours: 11 p. m., temperature 102, pulse 104, respiration 30, all pain gone and patient comfortable; 30 grains more of quinin were given. March 30, 10 a. m., temperature 102.4, pulse 96, respiration 34; at this time 30 grains of quinin were given; 6 p. m., temperature 103, pulse 96, respiration 32; 12 p. m., temperature 102, pulse 100, respiration 30: 30 grains quinin administered. March 31, 10 a. m., temperature 102.8, pulse 110, respiration 28; 25 grains quinin given; 5 p. m.,

temperature 102.8, pulse 84, respiration 28; 20 grains quinin were given. April 1, 10 a. m., temperature 101, pulse 88, respiration 24; 6 p. m., temperature 102, pulse 88, respiration 30; 25 grains quinin given. April 2, 10 a. m., temperature 100.4, pulse 84, respiration 28, large dose omitted and routine doses continued. April 3, condition normal, temperature 98.5, pulse 80, respiration 22, resolution not complete.

CASE 2.—Male, aged 20; called April 11, 10 a. m.: temperature 102, pulse 120, respiration 36, pain in lower part of left lung with rusty sputa; 48 grains quinin given, and 12 grains every two hours thereafter, with 10 m. tincture chlorid of iron every three hours. Saw him one hour later and gave him 24 grains more; 5 p. m., temperature 103, pulse 128, respiration 32; gave him 36 grains, and 18 grains one hour later. April 12, 10 a. m., temperature 99.6, pulse 96, respiration 26; ordered 6 grains quinin every two hours and iron continued. April 13, 12 a. m., temperature 99, pulse 78, respiration 22. In this case the treatment began April 11 and terminated April 13.

CASE 3.—R. M., male, aged 22, weighing 200 pounds and an alcoholic. The doctor was called to see him May 12, 1906. Patient had been sick three days and attended by another physician, who informed the parents that he could not recover. At 2 p. m. on the fourth day his temperature was 103.5, pulse 132, respiration 30, consolidation left lower lobe, with severe pain, and profuse rusty or rather bloody sputa. Marked hebetude and great prostration. Was given 48 grains quinin at 4 p. m., 24 grains two hours later and 6 grains every two hours thereafter, and tincture chlorid of iron 15 m. every four hours. May 13, 9 a. m., temperature 101.4, pulse 120, respiration 24; 24 grains quinin given. May 14, 11 a. m., temperature 103, pulse 112, respiration 24; 30 grains of quinin given, and at 12 a. m., 15 grains more were given: 10 p. m., patient delirious, temperature 102, pulse 108, respiration 24; given 30 grains of the triple bromids every three hours. May 15, 10 a. m., continued delirious, temperature 100, pulse 112, respiration 30; continued routine treatment and the bromids: delirium passed away and slept quietly all the afternoon. May 16, 8 a. m., temperature 98.6, pulse 108, respiration 24; routine quinin and iron continued, bromids omitted. May 17, temperature, pulse and respiration normal, but resolution not complete. Patient in three days was attending to his business.

CASE 4.—B. C., aged 22. The doctor saw him first Oct. 23, 1906. Had pain in left chest, short hacking cough but no expectoration, temperature 102, pulse 120. On physical examination for pneumonia no definite findings were found, but the evening of the same day he began to expectorate bloody sputum. The next day at 10

a. m. his temperature was 103, pulse 124 and respiration 32. Complained of severe boring pain in chest, cough frequent and discharging bloody sputum, body covered with perspiration; gave 48 grains of quinin and one hour later 24 grains, and followed with 12 grains every two hours, and tincture chlorid of iron every four hours; at 5 p. m. his temperature was 101, pulse 110, respiration 28; gave 24 grains of quinin and continued small doses thereafter. October 25, 10 a. m., patient had a fairly comfortable night, pain in his side mostly gone; gave 25 grains quinin and continued routine: 5 p. m., temperature 99, pulse 98, respiration 24. From this time on patient was practically normal except resolution, which required about three days.

Dr. Bosenbury makes this practical observation, "that quinin undoubtedly acts as a phylaxin, either micro or toxo, rapidly limiting the inflammation and establishing a normal equilibrium, but that plastic exudates can not be so rapidly removed, but leave during the next few days under non-inflammatory conditions."

The first stage in all specific diseases being the active inflammatory stage, I would immediately resort to anti-inflammatory measures, which are: relieving irritation and limiting or cutting off the blood supply and following this, or in connection with it, the administration of an anti-toxin or toxicid. And quinin, at this time, seems to be the only agent that may possess that quality.

Dr. Galbraith's conclusions are that when the temperature has reached 105 or over the dose of quinin should be from 60 to 70 grains as an initial dose, followed in one hour by one-half of the first quantity. If the temperature ranges from 103 to 104 then an initial dose of 40 to 50 grains will be sufficient. If a lower temperature is found in the beginning, then 40 grains, which is the smallest dose he would advise. He also administers the tincture of chlorid of iron in from 10 to 15 minim doses every four hours, alternating it with 10-grain doses of quinin. And in the event, at any time, of a pronounced rise of temperature he repeats the initial dose. He also strongly advises against any *compromise* in the way of dividing the doses of quinin during the active pneumonic stage.

My observations, in the six cases that I have been able to watch under large doses of quinin, have been that within a few hours after the initial dose they become quiet and composed, the rusty sputa begins to diminish, pain subsides, the pulse becomes decidedly slower and stronger, the dull leaden hue of the face disappears, and the vital depression is decidedly relieved. I do not believe that quinin acts simply as a febrifuge, but as a

toxicid by combining chemically with the toxic product, forming a new compound that is inert or non-pathogenic. In all acute specific diseases bacterial life is short, the virulence and duration of the disease is almost entirely dependent upon the action of the toxin produced while the bacteria are in evolution. Hence in the rational treatment of specific diseases toxicids should be searched for rather than bactericides.

I believe that Dr. Galbraith, and those who reported cases treated in like manner, were honest and made honest reports as to the clinical results. I know of no reason why they should mislead or juggle with facts. And if these reports were true it is a wonderful step in advance of the old symptomatic treatment with a death loss that is appalling to mankind. It must be remembered that most of these cases were reported by men who were practicing at a very high altitude, where there could be but little pulmonary obstruction without asphyxia, owing to the fact that atmosphere at a high altitude is poor in oxygen. The death rate from pneumonia at these places is from 50 to 75 per cent., and yet this result was lowered to about 2 per cent.

So far as my personal judgment is concerned, I am fully convinced that quinin is a patent, powerful and valuable remedy in pneumonia, and that it exerts positive specific action in streptococcus toxemia involving puerpural or erysipelatos inflammations, consequently I feel warranted in putting it to a full test in pneumonia. And as long as you have nothing better than symptomatic treatment to offer your patient in defense of his life, you nor he, have anything to lose in a careful and conscientious trial of the powers of large doses of quinin in this deadly disease.

While I am thoroughly satisfied that the body of this audience will not take kindly to the suggestions in this paper, and will, at least mentally, subject them to ridicule, if the seed falls upon the least receptive soil and one mother is saved to her babies, then my efforts have not been in vain.

During his stay in New York Dr. Koch visited the offices of the health department and was enthusiastic in his praise of the antituberculosis work inaugurated in this city by Dr. H. M. Biggs. He said that Berlin was about five years behind New York in the organization of the tuberculosis crusade, and was watching with interest the progress of the work here. Dr. Koch also visited the quarantine station and was much interested in the organization of that service. He was particularly impressed by the successful campaign which Dr. Doty has waged against mosquitoes in Staten Island.—*New York Medical Journal*.

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EDITORIAL

HEMOLYSIS IN MALIGNANT DISEASE.

In his oration on surgery at the Chicago meeting Crile opened up a subject of such interest and import that if his hopes are realized and his apparently well-founded theory becomes a clinical reality, it is difficult to measure the debt of humanity to him and to those who are working along similar lines. By means of a comparatively simple blood test a diagnosis of malignant disease has been established where before it could only be suspected. And in the fight against cancer this has been the one *bête noire* to our success. Radical operation at an early stage of the disease gives a reasonably good prognosis as to cure, but the difficulty lies in making the diagnosis before the lesion has diffused itself sufficiently to preclude its complete surgical eradication. And we know that some forms of malignant disease are prone to early metastasis. Nobody flatters himself any longer that he has made an early diagnosis of cancer of the uterus in the presence of hemorrhage and a stinking discharge; cancer of the breast when axillary, subclavicular or supraclavicular nodules are discernible; or cancer of the stomach when the vomitus reveals microscopically well-defined cancer fragments. That there is frequently a pre-cancerous stage is believed by such men as Boas, Ewald, Houser, Rosenheim, Leber, Mayo, Rodman, Moynihan and others, who recognize in ulcer this pre-existent form of malignancy. If this be true, then there is certainly a time in the early history of the malignant process when the lesion is absolutely localized, and it is just at this time that the disease must be recognized if we are to improve our percentage of cures. So that a reliable working test that would establish a diagnosis of malignancy at this stage would prove an even greater boon to humanity than the discovery of Koch's tuberculin.

The reaction, as given by Crile, is as follows: "The blood serum of a cancer patient may hemolyze normal corpuscles, but normal blood serum

usually does not hemolyze the red corpuscles of a cancer patient. In some patients—thus far only those with inoperable cancer—there was reverse hemolysis, i. e., the cancer corpuscles were hemolyzed by normal serum. In some cases there was no reaction. If this reaction is to be of diagnostic value then it must occur in cancer cases only or in diseases not readily confused with cancer.

"In 125 normal individuals tested there was hemolysis in no instance. Among eighty patients with cancer, 82 per cent. showed hemolysis, while those with benign tumors showed no reaction. In the cases of tuberculosis those showing hemolysis showed a much greater autolysis than hemolysis, thus giving a characteristic reaction. In chronic suppurations and acute infections no hemolysis occurred."

A correct interpretation of the test proved it of positive value in the following cases: Long-standing breast myxoma recently enlarged, clinical diagnosis "cancer transformation," hemolysis negative, the case proved benign; bone tumor gradually enlarging for six months, clinical diagnosis "sarcoma," hemolysis negative, osteomyelitis was demonstrated; a like result obtained in a tumor of the clavicle; breast tumor in a woman of 46, clinical diagnosis "carcinoma," hemolysis negative, the tumor proving to be a small cyst surrounded by hyperplasia; secondary anemia with indigestion but without other cancer symptoms showed hemolysis, two months later epigastric tumor presented and fragments of vomitus showed carcinoma; luetic sigmoidal stricture under treatment ten years showed hemolysis, at operation early stage of "cancer transformation" was revealed; uterine fibroid without suspicion of malignancy showed hemolysis, at operation "sarcomatous transformation" in tumor center being disclosed. So that although Crile does not believe in its present state of development the hemolytic test for malignancy to be specific, yet it has, in his hands, proven valuable as a diagnostic aid and occasionally has furnished the only evidence of malignancy.

Furthermore, basing their work upon that of Gaylord, Clowes, Beebe and others on cancer immunity, Crile and Beebe were able, by overtransfusion from an immune animal, to cure transplantable sarcoma in nine out of eleven dogs, some cachectic and even showing metastasis. The cured animals becoming in turn immune, were similarly employed for other dogs, and though repeatedly inoculated with sarcoma since, have remained both well and immune for over a year. From this they went to the human and attempted

immunization in six sarcomatous subjects into whom normal blood was transfused after removal of their tumors. Although of round and spindle-celled varieties, and hence of bad prognosis, they are now, after sixteen months, apparently free from the disease and show no hemolysis. It is hoped that they may become available in the future for curing and immunizing others until a colony of immunes becomes established.

So that all this, though being as yet more or less in the experimental stage, yet offers us a ray of hope that we are not at our zenith in the fight against cancer and that ultimately we may be as victorious as has been the crusade against the great white plague.

EDITORIAL NOTES

THE Grant County Medical Society has nearly \$1,350 in the treasury. That is a remarkable showing for a county medical society and indicates an exceedingly prosperous condition.

SO MUCH space in this number of THE JOURNAL has been required for the reports of the sessions of the Indiana State and the American Medical Associations that it became necessary to carry over to the August number some of the reports of proceedings of county societies.

WE AGAIN desire to call attention of county secretaries to the necessity of sending us items of news, and particularly information concerning deaths and removals. Short obituary notices concerning deaths of members of county societies should be forwarded promptly. Newspaper clippings are always appreciated, but due care should be observed to mark date of publication on the clipping.

THE JOURNAL is sent regularly to members of the Indiana State Medical Association who have paid their dues for 1908. There are 200 or 300 doctors who have not paid their dues but think they are still members of the Association and consequently entitled to THE JOURNAL. It might be well for county secretaries to remind all delinquents that their names will be added to the list of suspended unless settlement is made at an early date. The list of members in good standing will be published in an early number of THE JOURNAL.

TO ATTEND an annual session of the American Medical Association is one of the greatest treats which a physician can have, and if the attendance at the Chicago session is a criterion, the value of attendance at the A. M. A. sessions is becoming more and more appreciated by a larger number of medical men. The American Medical Association is to-day the largest and best medical association in the world, and the scientific work accomplished by its members ranks as foremost in practical and scientific value. An attendance at an A. M. A. session is equivalent to taking a short postgraduate course, and every man who desires to be progressive and in touch with the advances in medicine should profit by the advantages offered.

WE HOPE we shall see no more souvenir programs like the one issued for the French Lick session. Aside from the fact that it was superfluous, it received and merited severe criticism on account of the character of the advertising. Nostrum advertising should have no place in any publication issued in the name of the Association or in the interest of the Association. What is true of nostrum advertising is also true of nostrum exhibiting, and the House of Delegates acted wisely in passing a resolution directing future committees on arrangements to refuse to permit firms who manufacture, sell or advertise medicinal preparations not approved by the Council on Pharmacy and Chemistry of the A. M. A. to exhibit at any of our Association meetings.

WE HAVE recently received some circulars ("one cent apiece in stamps") sent out by Francis B. Livesay, Sykesville, Maryland, in which an impassioned and anarchistic plea is made for the abolishment of the public schools because they interfere with child labor. He says that honest labor for the child and the bread that it brings is worth more than an education and starvation. He claims that 50,000 children are dying every year as a result of education. President Roosevelt and Senator Beveridge, and everyone else in favor of child-labor laws, are severely censured, and the American Medical Association and all doctors come in for severe criticism because advocating more education concerning preventable diseases. Evidently the insane asylums of Maryland are all full or this crank would not be running loose.

THE committee recently appointed by President Bryan of Indiana University to visit various leading medical schools of the country, after

a tour of inspection, found medical teachers generally throughout the country familiar with the recent union of medical teaching forces in this state. They not only commended most heartily what they designated as the "Indiana movement," but were enthusiastic in their belief that what has been achieved in Indiana would be most helpful in elevating the standard of medical education elsewhere.

The chairman of the Council on Medical Education of the American Medical Association, in his official report, referred to the amalgamation of the medical interests in Indiana as one of the most hopeful features in the evolution of medical education which has perhaps occurred in years. Professor Welch, in speaking of this subject, congratulated the profession of Indiana that whereas, with a population of 3,000,000, there is but one medical school (that assured to be of first-class order), Maryland, with a lesser population has eight medical colleges.

WE HOPE and pray that the next session of the Indiana State Medical Association will develop a little more enthusiasm in the purely scientific work of the Association. The excessive heat did much to take attendance from the sections, but it did not in the least interfere with the politics of the Association, which seemed to be overworked from the beginning to the end of the session. The program gave promise of affording the members a scientific treat, but with few exceptions the papers were read to very small audiences. In some instances the essayists failed to put in an appearance, and to cap the climax a number of papers were read by title. This kind of work should not prevail at future sessions, and we hope some radical action will be taken to prevent its repetition. There should also be no meetings of the House of Delegates conflicting with meetings of the sections. The first meeting of the House of Delegates should be on the day preceeding the first day of the session, and all other meetings of the House of Delegates should be at hours not conflicting with the meetings of the sections. Unless some attention is given these matters our State Association will fail to live up to its aims and objects.

WE DESIRE to call special attention to the full-page announcement of the Indiana University School of Medicine found in the advertising pages of this number of *THE JOURNAL*. The announcement is noteworthy from the fact that it is the first official bulletin of the one and only

medical school in Indiana resulting from the consolidation of all the previously existing medical schools in the state.

The amicable and equitable settlement of the Indiana Medical College question is a source of great satisfaction to everyone and we are proud of the fact that the contending factions in the medical profession have considered the question and come to a settlement of it with the single purpose in view of having but one medical school in the state, and that one of exceptional merit and under the control of the state. The result is a distinct advance in medical education and at once puts Indiana in a position to have one of the best medical colleges in the country. It now remains for the legislature to deal liberally with the Indiana University when making an appropriation for the medical department, and we believe that with the influence which a united medical profession and the lay friends of the University can bring to bear, the desired result will be attained.

To occupy a place upon the program of one's state society should be considered an honor second only to a place upon the program of the national society. That such an honor should be so lightly regarded as for its recipient to fail to attend the meeting, present his subject and be glad of the opportunity, unless vital interests prevent, is both ungrateful and unfair. No little time and pains are spent in arranging the program for the annual meeting of a society of the magnitude of that of our state, and it is expected that all who are favored with a place thereon will gladly respond. Many a member who has the interest of his society at heart attends at considerable sacrifice of time and business interests, and he has a right to expect that the program will be all that it originally purports to be, and perhaps even more. Often-times more is gained from the discussion of a subject than may have been covered by the essayist, particularly when the time limit is short for the reading of papers, as it needs must be. There are, of course, certain extenuating circumstances, such as death or serious illness in one's own immediate family, which furnish a legitimate excuse for an essayist to absent himself, but in the absence of such exigencies there is little excuse for the man who allows his name to appear upon a state program, or any other, for that matter, and fails to fulfill his obligation to those who have so honored him.

We sincerely trust that it will be a long time before we have a repetition of the many defaults that obtained at the French Lick meeting.

THE registration as ordinarily carried on at our annual sessions is of little value because it does not represent a list of members who are in attendance. Oftentimes the names of doctors who are not members, and even the names of exhibitors and other laymen, will be found on the registration list. This should be changed at future meetings, and we believe it is time to adopt some such system as that used by the A. M. A. in registering attendance, whereby only those who present membership cards or other credentials are permitted to register. There is no reason why the secretary of the state association should not issue a membership card to every member who has paid his dues for the year, the cards being very similar to those issued by the A. M. A., and such cards would always be a passport at the annual sessions of the state association. Another good reason for the issuance of membership cards is that it gives every member something which definitely shows that he is a member in good standing and entitled to all the rights and benefits of the association, including a subscription to *THE JOURNAL*. Until the membership card is issued he is not entitled to the rights and benefits of the association. We hope that with the beginning of the new year on January 1, when the annual assessment for 1909 becomes due, membership cards will be issued to each and every member, and that such membership cards or other equally definite means of identification as a member will be a requirement for registration at Terre Haute.

WE HAVE received some letters written by some of the Indiana life insurance companies to medical men concerning the \$3 examination fee, which would prove interesting reading if published. These letters indicate that it is not a question of what the services are worth but what the doctors will accept for the work which influences life insurance companies. One company even has the brazen effrontery to say that a doctor can afford to drive five or six miles and make a life insurance examination for \$3 because the \$3 life insurance examinations made in his office overbalance the lack of sufficient fees for the five or six mile drive; and they put up the further argument that doctors frequently make drives of five or six miles to see patients and are never paid for the service and life insurance companies are always good pay. This certainly is the limit, but it is no more than can be expected from organizations that have as their ultimate aim to get all they can and give as little as they can.

We believe that it is high time for the medical profession of Indiana to take hold of this matter in a fearless and vigorous manner. Two or three counties of the state have already taken a positive stand, as evidenced by the communication from Benton County published in this issue of *THE JOURNAL*. If more counties will take a similar stand it will not be long before the insurance companies paying but \$3 for examinations will have hard picking in Indiana, and they deserve the fate. Incidentally we believe the medical directors of insurance companies are deserving of severe criticism for their fight against the medical profession in efforts to secure adequate compensation for professional services rendered.

CORRESPONDENCE

THE THREE-DOLLAR FEE FOR LIFE INSURANCE EXAMINATIONS.

OXFORD, IND., June 29, 1908.

Editor The Journal:—The physicians of Benton County have decided to charge all old-line life insurance companies \$5 for each examination. Most of the companies have accepted the proposition without a word and are paying the price, while others are making a fight. One company has run examiners in from another county, but when the applicant asks that his family physician be permitted to make the examination no objection is made to the \$5 fee demanded. We have not a man in our country who will make an examination for less than \$5, and we are sorry to think we have brethren in the cities who are so cheap and who do not think enough of their profession and ability to demand a proper fee for their work, but are willing to accept anything a company may offer.

The companies will tell you that you are well paid for your work and that you do not assume any responsibility, but let them have a loss or two from oversight or ignorance on the part of the examiner and you will see how soon they will find another examiner. They say they can not afford to pay more than \$3 for a life insurance examination. Have you heard of an insurance company breaking up lately unless to beat some one? Have you heard of any officers of life insurance companies working for small salaries? Has any effort been made to cut down the large salaries paid to officers and large commissions paid to agents so that the policy holder could get his insurance cheaper? We do know that life

insurance is one of the greatest money-making schemes in existence, and, to my knowledge, the companies have not reduced the premium in order to help the insured. But this is nothing to us one way or another, except that we know they are able to pay the fee. We know that an honest and capable physician is a necessity to any insurance company, and we know that his services are worth \$5 for every examination he makes. If you seek the services of any good lawyer for an opinion in a case where anything from \$500 to \$1,000 is involved he will charge you not less than \$5 to \$10. In a life insurance examination anything from \$1,000 to \$10,000 or more is involved, and a fee of \$5 for passing an intelligent opinion upon the risk, based upon careful examination, is reasonable indeed.

The insurance companies will pay a \$5 fee if all medical men refuse to make examinations for less. We ought to put a price on our labor and not allow any one to dictate to us what we can charge. Let us discuss this question in our county and state societies and in our journals. Our profession should not be lowered to the level of a trade, and our services should not be bought like the services of a common laborer. Our weak-kneed brethren should have the courage to say "no" when offered \$3 to make an examination for some agent who is getting 65 per cent. of the premium. It is only a matter of time until all of the insurance companies will pay the full \$5 fee, as they have done before. Then the fellows who were cheap will be dropped. The insurance companies will have no more use for cheap examiners and the man who has held out for a full fee will get the work. This is not a conspiracy to extort an unreasonable price for services or an effort to intimidate any one, but an effort to secure reasonable and just remuneration for work that is worth all that is asked for it. The man who thinks that his time and ability are not worth more than \$3 should not receive more than \$3, and it is a safe proposition that he is giving services actually worth even less.

Respectfully, R. E. LEE.

PERSONALS

DR. G. G. ECKART has assumed the practice of Dr. A. M. Loyd of Marion, who is locating in the West.

DR. C. A. WARWICK has given up his practice at Marion and has gone to his former home in Keokuk, Iowa.

DR. ED CRUSE, house surgeon of the Lutheran Hospital, Fort Wayne, is in Europe doing post-graduate work.

DR. C. J. ROTHSCHILD, Ft. Wayne, leaves the latter part of this month for Europe, where he will do postgraduate work for several weeks.

DR. AND MRS. WM. F. SHUMAKER, of Butler, are making an extended trip to the Pacific Coast. They expect to be away two or three months.

DR. GEO. D. KAHLO, president of the Indiana State Medical Association, served as official physician for the Democratic convention at Denver.

DR. G. L. GREENAWALT, Ft. Wayne, has returned from an extended vacation trip which included a visit in Chicago, where he did post-graduate work.

DR. GEO. T. MCCOY of Columbus, ex-president of the Indiana State Medical Association, lost his eldest daughter, Mrs. Gertrude McCoy Thomas, by death the last week in June.

NEWS, NOTES AND COMMENTS

THE members of the faculty of the late Purdue School of Medicine presented to President Stone of the university a beautiful gold watch and an engraved testimonial of regard signed by all the members of the faculty, as an evidence of their appreciation for his efforts in bringing about a satisfactory solution of the medical college question in Indiana.

THE Chicago and Suburban Health League held an important meeting at Indiana Harbor March 2. The question discussed was "What Is to Be Done to Prevent the Spread of Typhoid Fever in the Cities Bordering on Lake Michigan. Especially Those of the Calumet Region?" The idea of the league is that each physician in the cities of the Calumet region who has found a case of contagious disease should be prompt to report the same to the secretaries of the health boards.

THE city of Logansport has passed an ordinance regulating the selling and the practice of medicine by itinerant physicians and other persons. The ordinance is as follows:

Section 1.—Be it ordained, by the Common Council of the city of Logansport, Ind., that before any itinerant physician or other traveling person is authorized to practice or offers to practice as a physician or sell or offer to sell any medicine or other drugs or remedies used in curing and healing diseases or recommended for such use, within the limits of the city of Logansport, Ind., such itinerant physician or other traveling person shall make application to the city controller for a license granting such privilege, which application shall specify the number of days such itinerant physician or other traveling person intends to practice or offer to practice or sell or offer to sell such medicine, drugs or remedies. The city controller upon presentation of a receipt for such payment shall issue a license for the number of days such receipt was issued.

Sec. 2.—Any person or persons, firm or corporation, or any person or persons acting as agent to any firm or corporation, or person, or persons, violating any of the provisions of this ordinance shall, upon conviction thereof, be fined in any sum not less than fifty (\$50.00) dollars or more than one hundred (\$100.00) dollars for the first violation and not less than fifty (\$50.00) dollars or more than three hundred (\$300.00) dollars for each subsequent violation.

Sec. 3.—Nothing in this ordinance shall be construed to apply to traveling salesmen in the sale of medicine, drugs or remedies to *bona fide* druggists or physicians.

Sec. 4.—This ordinance shall become in full force and effect on and after its passage and legal publication thereof.

Presented to the mayor for signature June 1, 1908.

Approved this 1st day of June, 1908.

C. F. HAMMONTREE, City Clerk.

GEO. P. MCKEE, Mayor.

C. F. HAMMONTREE, City Clerk.

It is reported that J. Lor Wallach, who claims he can cure leprosy, has been permitted by the Honolulu Board of Health to treat the lepers of the Molokai settlement.—*St. Louis Medical Review*.

After a long contest the Maryland State Senate, on March 19, passed a bill preventing Christian Scientists or faith healers from practicing in Maryland without the diploma of regular physicians. The bill has already passed the house.—*The Medical Fortnightly*.

SOCIETY PROCEEDINGS

Indiana State Medical Association.

French Lick Session.

(First General Meeting.)

The fifty-ninth annual session of the Indiana State Medical Association was held at French Lick, Indiana, June 18 and 19, 1908. The first general meeting was called to order by the president, D. C. Peyton, of Jeffersonville, at 10 o'clock a. m., June 18, and Hon. Thomas Taggart made a few felicitous remarks welcoming the doctors to French Lick. At the conclusion of his remarks, on motion, he was made an honorary member of the society. Dr. Kahlo, of the local arrangements committee, made an announcement concerning entertainments and the meeting then divided into the medical and surgical sections and took up the scientific part of the program.

(Second General Meeting.)

The second general meeting was held early Friday morning. Dr. J. M. Anders, Philadelphia, the honored guest of the Association, delivered an address on "Intestinal Autointoxication," after which the two sections took up the regular order of work.

SURGICAL SECTION.

(Morning Meeting, First Day.)

The Surgical Section was called to order by Dr. D. C. Peyton, President of the Association. The papers read and discussed at this meeting were: "Strangulated Hernia, the Importance of Its Early Recognition and of Its Radical Treatment," by T. B. Eastman, Indianapolis; "The Diagnosis and Treatment of Fluctuating Tumors of the Female Pelvis," by G. H. Grant, Richmond; "The Puerperal Perineum, Its Protection and Repair," by M. I. Rosenthal, Fort Wayne; and "The Technic of Harelip and Cleft Palate Operations," by J. R. Eastman, Indianapolis.

(Afternoon Meeting, First Day.)

At the afternoon meeting of the Surgical Section the following papers were read and discussed: "Scoliosis," by David Ross, Indianapolis; symposium on obstruction of the bowels, (a) "Obstruction of the Bowels," E. D. Clark, Indianapolis; (b) "Obstruction of the Bowels from Traumatism," J. H. Ford, Indianapolis; "Gonorrheal Ophthalmia," by W. N. Sharp, Indianapolis; and "Dermoid Cysts," by H. G. Nierman, Fort Wayne.

(Morning Meeting, Second Day.)

At this meeting of the Surgical Section the following papers were read and discussed: "Raynaud's Disease," by John Kolmer, Indianapolis; in the symposium on obstetrics the following papers were read: "Normal Labor," by Jane Ketcham, Indianapolis; "Toxemias of Pregnancy," by L. Burkhardt, Indianapolis; "Puerperal Infection," by G. B. Jackson, Indianapolis; and Dr. Hugh Cowing, Muncie, gave a "Report of 600 Cases of Labor in Private Practice."

MEDICAL SECTION.

(Morning Meeting, First Day.)

The Medical Section was called to order by W. H. Stemm, of North Vernon, First Vice President of the Association. The papers read and discussed at this

meeting were: "A Few Important Points in Regard to Nervous and Mental Diseases," by Charles F. Neu, Indianapolis; Symposium on the heart, (a) "Myocarditis from a Purely Pathological Standpoint," R. H. Ritter, Indianapolis; (b) "Myocardial Failure from Other Causes Than Valve Lesions," A. C. Kimberlin, Indianapolis; (c) "The Relationship of Heart and Kidney Affections," Robert Hessler, Logansport; symposium on diabetes, (a) "Diagnosis and Treatment with Report of a Case," L. L. Mobley, Summitville; (b) "The Treatment of Diabetes and Glycosuria," G. D. Kahlo, French Lick.

(Afternoon Meeting, First Day.)

At the afternoon meeting of the Medical Section, first day, the following papers were read and discussed: Symposium on public hygiene, (a) "Disposal of Sewerage in Small Towns," G. B. Lake, Wolcottville; (b) "Epidemiology of Typhoid Fever," H. O. Bruggeman, Fort Wayne; (c) "Report of Committee on State Medicine," J. N. Hurty, Indianapolis. Symposium on tuberculosis, (a) "Tuberculin Therapy," W. T. S. Dodds, Indianapolis; (b) "The Early Clinical Diagnosis of Pulmonary Tuberculosis," T. Victor Keene, Indianapolis; (c) "Report of Committee on Tuberculosis," J. A. Little, Logansport.

(Morning Meeting, Second Day.)

At this meeting of the Medical Section the following papers were read and discussed: Symposium on pharmacology, (a) "Relation of Physicians and Drug-gists," S. E. Earp and J. R. Francis, Indianapolis; (b) "A Plea for the Use of Pharmacopeal and National Formulary Preparations," Frank H. Carter, Indianapolis; symposium on inebriety, (a) "A Plea for State Control and Treatment of Dipsomania, Inebriety and Drug Addictions," A. L. Wilson, Indianapolis; (b) "Report of Committee on Inebriety," H. J. Hall, Franklin; "Atypical Pneumonia," Charles R. Sowder, Indianapolis.

(Afternoon Meeting, Second Day.)

On account of the heat and the fact that many members had gone home, a number of papers were read by title. The medical and surgical sections joined. The following papers were read, completing the program: "Ocular Manifestations in General Disease," by W. F. Hughes, Indianapolis; "Some Considerations of Intracranial Diseases," by G. W. Coombs, Indianapolis; "Etiology of Rheumatism and Chorea," by W. D. Hoskins, Indianapolis; "Report of Committee on Prevention of Venereal Diseases," by Goethe Link, Indianapolis; "Anesthetics Considered as a Specialty," by C. N. Combs, Terre Haute.

The President-elect, Dr. G. D. Kahlo, of French Lick, was introduced by Chairman Peyton and made a few remarks, thanking the Association for the honor.

Adjourned to meet at Terre Haute in the Autumn of 1909.

THE HOUSE OF DELEGATES.

(First Meeting.)

The first meeting of the House of Delegates was called to order at 2 o'clock p. m. by President D. C. Peyton, Thursday, June 18. Dr. F. C. Heath, Secretary, read his report, which, on motion, was referred to the auditing committee. The report of the treasurer, Albert E. Bulson, Jr., of Fort Wayne, was also read and referred to the auditing committee. Dr. Bulson also made the report of the Council, including

a brief statement as to the establishment of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION and its expense.

The Council recommended changes in the by-laws of the Association, which were required to lay over one day before being acted upon by the House of Delegates, and also some other recommendations, as follows:

First, that Sections 13 and 14, Chapter ix of the by-laws be amended to read as follows:

"Section 13. The fiscal year for the Association shall be from January 1 to December 31, and all assessments shall be for the fiscal year and payable in advance. The Secretary of each component society shall forward the assessment for his society, together with the roster of officers and members and list of non-affiliated physicians of the county to the Secretary of this Association on January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Secretary of this Association the assessment for such new members. The assessment shall be the same for all members and entitle the members to all the benefits, including the publications of this Association, from the time of paying the assessment to the close of the fiscal year only.

"Section 14. Any county society which fails to pay its assessment or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met."

Second, that Section 11, Chapter ix, of the by-laws be amended to read as follows:

"At some meeting in advance of the annual session of this Association each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates to the Secretary of this Association at least 30 days before the annual session."

Third, that Section 5, Chapter vii, of the by-laws be amended to read as follows:

"The Council, as the Finance Committee of the Association, shall have authority to appropriate money for and provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amount of their salaries. All money received by the Council and its agents resulting from the discharge of duties assigned to them must be paid to the Treasurer of the Association. The Council shall annually audit the accounts of the Treasurer and Secretary and other agents of this Association, and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year and the amount of other property belonging to the Association, under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary or Treasurer the Council shall fill the vacancy until the next annual election."

Fourth, that "the reports of standing committees of this Association be printed in the number of THE JOURNAL issued immediately before the annual session at which such reports are intended for presen-

tation, and that in view of this publication the reports be not read before the House of Delegates but be discussed and disposed of without reading."

Fifth, that "the next annual meeting of the Indiana State Medical Association shall be held in the Fall, preferably the last week of September or the first week in October, the exact dates to be determined by the officers and the Committee on Arrangements."

The report of the Committee on Public Policy and Legislation was called. The report was to be read in the medical section and discussed. Chairman Hurty stated that the committee had two recommendations to make, and in that connection Dr. Edwin Walker, of Evansville, offered the following resolution:

WHEREAS, It is necessary that the General Assembly of 1909 shall make an appropriation to construct and conduct the Hospital for Treatment of Tuberculosis, which was created by the General Assembly of 1907, the site for the same being purchased, therefore, be it

Resolved, That the Indiana State Medical Association heartily favors such an appropriation, and that the organization as such and its members as citizens and taxpayers urges that the said appropriation, being for a true and great economy, be very liberal. And be it further

Resolved, That the President of this Association shall appoint a special committee of ten, to be called "The Indiana State Medical Association Committee on Appropriation for the Hospital for Treatment of Tuberculosis," and it shall be the duty of said committee to advocate before the next General Assembly, in the name of the Association, that a liberal appropriation be made for the construction and support of the said hospital.

On motion the resolution was adopted. In the same connection Dr. T. B. Noble introduced the following resolution concerning the Committee of 100 of the American Health League, and moved its adoption:

WHEREAS, The Committee of One Hundred, and its auxiliary society, The American Health League, are organized for the purpose of advancing the public health interests and the establishing of a National Bureau of Public Health, and,

WHEREAS, The said organizations are of the highest character and have in their membership many of the most prominent philanthropists, statesmen and physicians of our land, therefore, be it

Resolved, That the Indiana State Medical Association indorses the above named organizations and the objects for which they are organized, and heartily recommends them to the people.

Carried and adopted.

The Committee on Tuberculosis and the Committee on Prevention of Venereal Diseases had no recommendations, and the reports were placed in the program to be read Friday in the medical section.

Dr. Sharp, of Jeffersonville, Chairman, read the report of the Committee on Medical Education and offered the following resolution relative to the combination of the medical schools and the affiliation with Indiana University:

WHEREAS, The authorities of Purdue University, and Indiana University, have mutually agreed, in the interest of all concerned, and in the higher interest of medical education, to combine the former medical schools of this State under the control of Indiana University, and

WHEREAS, The mutual agreement referred to is fully set forth in the following published statement, viz.:

"The efforts of Indiana University and of Purdue University to promote medical education in this State through cooperation with the members of the profession and with existing proprietary medical schools have been undertaken in good faith and with the one aim of establishing this important branch of professional training upon a sound educational basis. Indiana University has sought for many years to establish and develop such a department, in which efforts it has encountered many obstacles, but has made continued progress. Purdue University entered this field only when convinced that a service could be rendered to the profession and to the State by the tender of its offices in consolidating existing courses and aiding in the evolution of a single, strong medical school at Indianapolis under the auspices of the State and with the cooperation of other educational interests, a task which was undertaken only after it seemed that other efforts in this direction had failed.

"Out of these efforts by the two institutions had grown an unfortunate controversy which operated to confuse the situation, and becloud, in the minds of the public, the true relations of the universities. In the belief that the present conditions are delaying the educational progress and interfering with the highest functions of the two universities the logical conclusion follows that the two medical schools now in operation in Indianapolis under the direction of the two universities should be united in one school, and that this should be under the exclusive control of one or the other of these universities.

"Since Purdue University has at no time regarded a department of medicine as an essential part of its program, and, on the other hand, Indiana University believes that it has been especially charged with the responsibility for such instruction, the latter institution has been selected to proceed in the matter, and the trustees of the two universities have this day mutually agreed to the following conditions to which the faculties of their respective medical schools assent, namely:

"To a union of the two medical schools under the direction of Indiana University.

"To a selection of the faculty of the new school with due regard to the members of the present faculties.

"And to the maintenance of a complete medical course in Indianapolis as well as the two-year course in medicine at Bloomington.

"Only in this way does it seem feasible to accomplish the ultimate purpose of developing for the State a sound system of medical education, which has been the aim of both parties in their efforts in the field, as well as to promote the harmonious and friendly relations so essential to the proper discharge of the functions of both universities.

"It is hoped, therefore, that the citizens of the state, whether remotely or intimately interested in this question, will accept the above decision as evidence of the disinterested motives of these institutions, and their desire to serve the State with undiminished energies.

"W. L. BRYAN,

"President Indiana University.

"W. E. STONE,

"President Purdue University.

"Indianapolis, April 4, 1908."

Therefore, Resolved, That the Indiana State Medical Association fully and cordially indorses this movement and believes it is the wisest possible solution of the question of medical education in Indiana, and will best tend to secure the best results. Also,

Resolved, That we congratulate the authorities of the two universities, and the medical schools referred to, and pledge our efforts to secure the enactment of proper legislation to carry out the basis of union agreed upon which provides for "The maintenance of a complete medical course in Indianapolis as well as a two-year course in medicine at Bloomington."

The resolution was adopted by a rising vote and the members seemed to regard the settlement of this matter with great satisfaction.

The report on Necrology was not read but will be published in *THE JOURNAL*.

The Committee on Inebriety, Dr. H. J. Hall, Franklin, Chairman, offered the following resolution concerning preliminary steps for the establishment of an hospital for inebriates and moved its adoption:

Resolved, By the Indiana State Medical Association that preliminary steps be taken for the establishment of a hospital for inebriates at the next meeting of the State Legislature.

The resolution was adopted. The report of the committee will be published in *THE JOURNAL* along with the other reports.

Dr. F. C. Heath, of Indianapolis, introduced the following resolution concerning the repeal of the present optometry law, which, on motion, was adopted:

Resolved, That the Indiana State Medical Association unqualifiedly favors the repeal of the present optometry law, on the ground that the relief of eyestrain is the practice of medicine, and no standard of fitness for such work should be established unless it include complete knowledge of the anatomy, physiology and the diseases of the eye, and the effect of diseases of the general system thereon.

Dr. Varble, of Jeffersonville, introduced the following resolution, which, on motion, was adopted:

WHEREAS, Certain newspapers, periodicals and magazines like the *Indianapolis Evening News*, *The Ladies Home Journal* and *Collier's Weekly*, have, in the recent past, and are now, most honorably defending and educating the public against fraudulent swindlers, pretenders and robbers who have been and are now seeking to defraud, swindle and rob the credulous sick and afflicted by misrepresentation and falsehood through the columns of the press, therefore, be it

Resolved, That we recommend that all honorable physicians everywhere give undivided and faithful support and encouragement in every possible way to the publications above mentioned, and to all others of like character. We view with surprise and shame the dishonorable mercenary spirit of any newspaper or periodical of any kind that will stoop so low, and so far forget all the attributes of honor and decency as to sell its columns, give its support, or in any way join any conspiracy with impostors and swindlers to impose upon, deceive and swindle the credulous afflicted, who, in many instances, by reason of long-continued, hopeless affliction, are already impoverished.

Dr. Albert E. Bulson, Jr., Fort Wayne, introduced the following resolution, which, on motion, was adopted:

Resolved, That the Committee on Arrangements hereafter do not accept as exhibitors at any sessions of the Indiana State Medical Association any firms that are selling to physicians, or exhibiting to physicians, proprietary preparations not approved by the Council on Pharmacy and Chemistry of the American Medical Association.

Adjourned.

THE HOUSE OF DELEGATES.

Second Meeting.

The second meeting of the House of Delegates was held Friday afternoon. The roll call showed 65 officers, councilors, and delegates present.

The election of officers resulted as follows:

President, George D. Kahlo, French Lick; First Vice President, E. D. Freeman, Osgood; Second Vice President, Charles H. McCully, Logansport; Third Vice President, Charles Knittick, Frankfort; Secretary, F. C. Heath, Indianapolis; Treasurer, Albert E. Bulson, Jr., Fort Wayne.

Dr. B. O. C. Bowell, Laporte, was elected councilor of the Tenth district, for three years, to succeed E. G. Blinks, of Michigan City, and Drs. W. R. Davidson, Evansville, First district; W. H. Stemm, North Vernon, Fourth district; W. N. Wishard, Indianapolis, Seventh district; C. A. Daugherty, South Bend, Thirteenth district, were re-elected councilors, each to serve three years.

Delegates to the American Medical Association, for two years, W. N. Wishard, Indianapolis, and Edwin Walker, Evansville; for one year, G. W. Thompson, Winamac, and H. C. Sharp, Jeffersonville; alternates, J. T. Dickes, Portland, and G. H. Grant, Richmond.

Terre Haute was selected as the place for the next session, and it was voted to have a two days' session. A motion was made and carried that the delegates at the Terre Haute session be provided with a distinguishing badge.

The amendments to the by-laws and other recommendations presented by the Council at the preceding meeting, were taken from the table and passed unanimously.

A resolution pledging the Association in an effort to totally banish saloons was laid on the table, it being the general consensus of opinion of the delegates that the Association ought not mix in politics.

The following resolution was unanimously adopted:

Resolved, That the Indiana State Medical Association, in annual session June 18 and 19, 1908, most cordially indorses the International Congress on Tuberculosis to be held at Washington, D. C., September 21 to October 12, and that the President be empowered and directed to appoint ten delegates to represent the Association at such Congress.

The Association also unanimously passed the following resolution:

WHEREAS, Dr. Charles A. L. Reed, of Cincinnati, has been urged to become a candidate for the United States Senate from Ohio, and,

WHEREAS, The States of Missouri and Kansas, and the American Medical Association have unanimously adopted resolutions urging and approving Dr. Reed's candidacy, therefore be it

Resolved, That the Indiana State Medical Association, in annual session this June 19, 1908, at French Lick Springs, heartily indorse his candidacy and recommend that every honorable means be employed to procure his election.

The thanks of the Association were voted to Dr. J. M. Anders, of Philadelphia, the guest of the Association, for his admirable scientific address, the officers and committees of the Association, the French Lick Hotel Company, and the Orange County Medical Society for their services in making the French Lick meeting an unqualified success.

Adjourned.

THE COUNCIL.

Mr. President and Members of the House of Delegates:

There have been two meetings of the Council since the last session of the Association, the proceedings of both meetings having been published in *THE JOURNAL*. At the first meeting the organization work was discussed and favorable action taken upon the proposition to establish a journal for the Association. Arrangements were also made for two or more lectures to the public in each councilor district by Dr. J. N. McCormick, the A. M. A. medical organizer. At the second meeting favorable action was taken on the proposition to employ A. M. A. canvassers to secure new members for the county medical societies. As a result of this action about one-third of the State has been worked by the canvassers, resulting in the securing of 150 applications for membership in county societies. The remaining portion of the State will be worked by the canvassers during the next few months, and it is thought that fully 350 more applications for membership will be secured, thus adding 500 to the membership of the State Association. The work has been carried on under the immediate direction of the Council, and *THE JOURNAL* has been of material assistance in securing such satisfactory results. From 200 to 400 sample copies of *THE JOURNAL* have been sent out every month to eligible doctors, each accompanied by a letter soliciting application for membership in the local medical society. The councilors have also rendered valuable service in efforts to increase interest in medical organization.

THE JOURNAL has finished the first half year of its existence and seemingly has met with the approval of a majority of the members of the Association. At the start a large part of the expense of publication had to be guaranteed by the editor, as the Association had not sufficient funds to meet the expense, but at the present time the assured income for the year is not only sufficient to publish a journal of 48 pages every month, as originally intended, but to warrant the addition of more reading pages and a greater liberality in the way of illustrations. The cost of publishing *THE JOURNAL* in its present form and size for one year will be approximately \$5,000, not counting any salary for the editors. Of this amount about \$1,800 is received from the Association in subscriptions and the balance must be secured from advertising. Remuneration for the editors' services is to be paid from any surplus at the close of the year.

The editorial policy of *THE JOURNAL* has been to work for the upbuilding of the medical profession of the State, and to advocate and uphold principles which represent the best interests of the profession. The advertising policy has been to accept no objectionable advertising, and in carrying this policy out it has been necessary to refuse over \$3,000 worth of advertising contracts, such as are regularly accepted by many other journals.

The Council recommends several amendments to the by-laws for the purpose of facilitating the purely busi-

ness management of the Association. These amendments include the fixing of a definite time for the beginning of the fiscal year for the Association and the time for payment of dues and receipt of reports from county secretaries, and giving the Council full authority to control the publication of *THE JOURNAL*, including all expenses pertaining thereto. A change in the date of holding the annual session is also recommended, and it is urged that the Committee on Arrangements accept as exhibitors at annual sessions no firms who are selling or advertising pharmaceutical products not approved by the Council on Pharmacy and Chemistry of the American Medical Association.

The councilor districts report as follows:

FIRST DISTRICT: W. R. Davidson, Evansville, Councilor. This district is well organized and the county societies seem to be in a flourishing condition. The membership remains about the same, but there is an increased interest in society work. The district has a good district society, meeting twice a year and having a good attendance.

SECOND DISTRICT: George Knapp, Vincennes, Councilor. This district is thoroughly organized with a good, active society in each county, and with a much more harmonious feeling among its members than there has ever been. The membership remains about the same. *THE JOURNAL* has been greatly appreciated.

THIRD DISTRICT: Walter J. Leach, New Albany, Councilor. This district is not in as flourishing a condition as it should be. The counties of Lawrence, Floyd, Clark and Scott are doing good work, but the counties of Dubois, Harrison, Washington and Crawford are not having regular meetings. The Councilor expects to visit these latter counties during the year and try and stimulate some interest in society work. There have been two splendid district meetings during the year, one at New Albany and the other at Jeffersonville.

FOURTH DISTRICT: W. H. Stemm, North Vernon, Councilor. In this district the membership remains practically the same, although one or two counties show an increase. The loss by deaths, removals, etc., counterbalances the gain. There is a vast improvement in the professional spirit since last year and a more fraternal feeling exists, leading to better work and attendance in the county society meetings. The district society is in a flourishing condition, there being a large attendance at each annual meeting. Three of the county societies, Decatur, Jackson and Jennings, have taken up the postgraduate course of study and are very enthusiastic over the results secured by the new plan. *THE JOURNAL* gives universal satisfaction and has received no word of complaint or criticism.

FIFTH DISTRICT: J. H. Weinstein, Terre Haute, Councilor. The counties of the Fifth District are in good condition. Parke county is having regular monthly meetings which are well attended, and renewed interest is shown in the work. Vermilion county has been completely reorganized and is now holding bi-weekly meetings. Putnam and Clay counties are holding monthly meetings and in some places they have organized local postgraduate clubs, which are proving a great success and very beneficial. Vigo county is holding weekly meetings and following closely the post-graduate course of study. The membership in Vigo county has increased over 25 per cent. in the last six months, making the number 108 on its roll. It has taken up the work with a great

deal of earnestness and is using pathological exhibits, presenting cases, and numerous stereopticon slides are shown. The district medical society meets twice a year, in March and September. The September meeting always being held in Terre Haute, and the March meeting being migratory. While a great deal of work has been done in the past year, yet there remains a great deal more to be done, and the councilor hopes to be able to give a still better report next year.

SIXTH DISTRICT: D. W. Stevenson, Richmond, Councilor. This district is now well organized and every county has a flourishing medical society. Franklin county was the last to organize an active working society, but it is now in excellent condition. The district society is very well attended and is productive of an immense amount of good. Fayette county has adopted the postgraduate course and is doing excellent work.

SEVENTH DISTRICT: W. N. Wishard, Indianapolis, Councilor. This district is well organized and shows a substantial growth in the membership of nearly all of the county societies. There is also a splendid fraternal feeling existing in the majority of counties. The district society is thoroughly organized and its meetings are very well attended.

EIGHTH DISTRICT: G. W. H. Kemper, Muncie, Councilor. In this district each county is thoroughly organized and the several county societies are doing good work. There have been slight gains in membership in all of the societies. Harmony prevails in every society. There is a well organized district society which meets semi-annually. It is well attended, valuable papers discussed, and much interest is manifested.

NINTH DISTRICT: George Rowland, Covington, Councilor. The district contains nine counties and the Councilor lives in the extreme southwestern portion. The railroad facilities are such that it is difficult for the Councilor to visit the several county medical societies in the district without considerable loss of time. The organization work has, therefore, been largely done by correspondence. Some of the societies are not as active as others, but all report regular meetings and considerable interest in society work. There have been no material gains in membership. *THE JOURNAL* has met with general approval by all members.

TENTH DISTRICT: E. G. Blinks, Michigan City, Councilor. In this district the counties of Lake, Porter and Laporte have societies in excellent condition. Newton county organized May 1st with thirteen members and promises to be an active organization. Jasper and Benton counties have no societies of any consequence, but could be brought to life by an active Councilor residing in one of those counties. In the district there has been a slight increase in membership. As yet no district society has been organized owing to the poor transportation facilities, but as soon as interurban service begins it will be possible to have a good district society. *THE JOURNAL* pleases every one.

ELEVENTH DISTRICT: Charles H. McCully, Logansport, Councilor. In this district the county societies are all in a healthy condition with the exception of White county, which seems to be in a bad way from a medical organization point of view. This society has had but one or two meetings in the past year and those meetings have been poorly attended. There is a strong feeling of personal antagonism and at present there seems but little possibility of affecting harmony.

Three of the county societies in the district are following the postgraduate work as outlined by the A. M. A. and others have the matter under consideration. Two counties have passed ordinances placing prohibitive licenses on the itinerant physicians or other traveling persons vending medicine, and the Medical Practice Act is being more rigidly enforced. There is a flourishing district medical society which meets semi-annually. There has been a decided increase in the membership, brought about through the work of the A. M. A. canvassers, *THE JOURNAL* and the effect of Dr. McCormack's lectures.

TWELFTH DISTRICT: Albert E. Bulson, Jr., Fort Wayne, Councilor. This district is well organized with the possible exception of Whitley county, where a society exists practically in name only. The Allen county society, the largest and most progressive society in the district, meets weekly and shows a marked gain in membership, now having 112 members. It began the postgraduate work but abandoned it with the close of the first half year and returned to regular programs, which have always been of great interest to all members. There are twenty eligible physicians in the county to be secured as members of the society. Adams county, which was dead for so long, now has a very flourishing society of twenty members with regular monthly meetings which are well attended. There is also entire harmony in the profession of that county. In this county it is suggested that branch societies should be established in some of the populous towns not easily accessible to the county seat where the regular meetings are held. Noble county has had an active medical organization for a good many years, even though the society meets but four times per year. It has thirty-two members in good standing, an increase of two during the last year. The meetings are all well attended and the programs are creditable from every point of view. Entire harmony prevails and the society as a society controls all contracts for treating the county poor, the remuneration for the service being quite satisfactory. Stenben County has a membership of 21, an increase of 8 during the past year. The scientific work is not up to the standard but seems to be improving as a result of the interest taken by some of the younger members. There is some lack of harmony in the medical profession, but this seems to be gradually dying out. Wells County has regular meetings once a month, and every eligible doctor in the county is a member of the society. Harmony prevails and the scientific work is satisfactory. DeKalb County is in good condition with a membership of 24, an increase of 6 over last year. There are still eight eligible doctors in the county whose applications the society expects to have within a short time. LaGrange County numbers every eligible doctor in the county in its membership, and the organization is in a flourishing condition in every respect. The district society is a wide-awake organization and its semi-annual meetings resemble State Society meetings on account of the large attendance and the high character of the scientific work done.

THIRTEENTH DISTRICT: C. A. Daugherty, South Bend, Councilor. This district is a very well organized district, there being flourishing societies in every county. The membership has increased in most of the societies and a harmonious feeling exists. *THE JOURNAL* pleases all members and is a great improvement

over the "Transactions." The district society is a live organization and its semi-annual meeting brings out a large attendance and excellent scientific work.

ALBERT E. BULSON, JR., *Sec.*

REPORT OF SECRETARY.

Mr. President and Members of the House of Delegates:

Your Secretary begs leave to present the following report:

The paid membership to date for 1908 is 2,455, at least 250 more than was ever reported at the annual session. About 150 members have failed to pay their dues prior to the annual session. We expect that the year will show a gain of several hundred. Benton, Crawford, Franklin, Newton and Starke Counties have been reorganized so that we now have organizations in every county of the State except Brown, Jasper and Ohio, and doctors from each of these counties belong to societies in adjoining counties. The new JOURNAL, and the A. M. A. organizers now working in Indiana, are to be large factors in increasing the membership. In a few counties the number of delinquents is still large, early payment of dues being contrary to custom and therefore difficult.

Respectfully submitted,

F. C. HEATH, *Sec.*

Approved: W. H. STEMM,

G. W. H. KEMPER,

Auditing Committee.

REPORT OF TREASURER.

Mr. President and Members of the House of Delegates:

Your Treasurer respectfully submits the following report for the year ending June 18, 1908.

Albert E. Bulson, Jr., Treasurer, in account with the Indiana State Medical Association for the year, ending June 18, 1908:

1907.	DEBIT.
May 21. To cash on hand.....	\$ 385.18
Jan. 1. To cash from Secretary, dues collected for year 1907.....	2,382.00
Total	\$2,767.18
	CREDIT.
By cash to Secretary, honorarium and incidental expenses	\$ 313.00
By cash to Chairman Committee on Publication, honorarium	100.00
By cash to Chairman Committee on Necrology, honorarium and incidental expenses.....	13.72
By cash to J. B. Champion, stenographer, 1907 meeting	120.00
By cash to Sentinel Printing Co., printing..	32.85
By cash to S. H. East, typewriting and addressing and mailing circulars.....	60.24
By cash to Joseph Ratti, envelopes.....	6.00
By cash to Cleary & Bailey, printing.....	51.25
By cash to United States Express Co., expressage stationery to Councilors.....	6.70
By cash to Councilors, expenses.....	142.33
By cash to William B. Burford, Transactions of 1907	1,400.22
Total	\$2,246.31
Balance on hand.....	520.87
Grand Total	\$2,767.18

Your Treasurer has also received from the Secretary \$2,455, representing dues collected to date for the year 1908, from which has been paid to THE JOURNAL, on the order of the Council, \$1,841.25, leaving a balance of \$613.75 from this year's dues, or a total balance of \$1,134.62. Your Treasurer holds this year's unpaid bills amounting to approximately \$880, which, upon approval, will be paid, leaving a balance of approximately \$250 in the treasury with all indebtedness of the Association paid to date.

Respectfully submitted,

ALBERT E. BULSON, JR., *Treas.*

Approved: W. H. STEMM,

G. W. H. KEMPER,

Auditing Committee.

REPORT OF COMMITTEE ON MEDICAL EDUCATION.

Mr. President and Members of the House of Delegates:

The Committee appointed to report on Medical Education, begs leave to submit the following:

After many months of careful consideration, the several interests concerned in the medical colleges of the State have combined; and the one great institution resulting will receive the cordial support of the members of the Association.

No words are needed from this Committee to emphasize the possibilities for good that must accrue from this union of the teaching forces, the clinics, and the class work, as will be planned and executed by the wise directors of the new college.

At the next session of the Indiana University School of Medicine, several new and important features will be incorporated as a part of the medical college work, as a result of an investigation of the leading medical colleges of the United States by a joint committee appointed for that purpose.

The State Board of Medical Examination and Registration have continued their efficient work, and are keeping Indiana on the same high plane on which their past labors have placed it. With 21 other States, it requires a four-year high school period, or its equivalent; and beginning in 1910, the Board will require one year of work in a college of arts devoted to physics, chemistry and biology, in addition to a four-year high school education. While all of these proposed advances are to be endorsed, your Committee would urge that a constant effort be made to attain higher ideals, and that the college which is so inseparably an interest of the State Medical Association, be brought as rapidly as possible to the plane which will entitle it to the recognition not only of all the medical colleges of this country, but of the whole medical world.

This is not impossible. In this country there are 48 per cent. of the medical colleges of the world. Twenty years ago, the most of these were ridiculed abroad, and the diploma of none of them was considered as sufficient evidence of a medical education to entitle its holder to engage in practice. While the various laws of the continental nations still prohibit our country's graduates from actually practicing, it is gratifying to note that the pre-medical requirements of the United States and the European countries are no longer so widely apart, and in several instances the medical course in this country is the equal of any in the world.

The problem of reciprocity remains the greatest one yet to be solved. In whole or in part, 34 states now reciprocate.

In conclusion, your Committee urges that a uniform pre-medical course, followed by such a collegiate course that all the States will without restriction or evasion grant the graduates of such course a license to practice, be the aim and effort of the Indiana State Medical Association to secure.

Respectfully,

H. C. SHARP.

JOHN C. SEXTON.

GEORGE H. GRANT.

Committee.

REPORT OF COMMITTEE ON INEBRIETY.

Mr. President and Members of the House of Delegates:

The provision of the pure food law that went into effect in the United States during the past year, requiring the per cent. of alcohol and other dangerous drugs to be placed on the bottles containing patent and proprietary medicines, is proving a splendid protection to the people against the formation of drug habits, and it has the approval of the medical profession. This is one of the most substantial advances that has been made in recent years in the prophylaxis of inebriety. We are pleased to note that one of the medical men of Indiana, Dr. Harvey W. Wiley, who is now at the head of the Government Chemical Department at Washington, had much influence in procuring this wholesome law. Dr. Reed Hunt, of the United States Hygienic Laboratory, has been rendering valuable service in this department. He has recently made experiments showing the effect of small doses of alcohol in increasing the susceptibility of animals' bodies to poisons. His experiments also demonstrated that lower animals fed on an extra supply of sugar foods could resist three times as much poison as those fed normally, while those that were fed on small quantities of alcohol were killed by one-third as much poison as those that received the normal diet. The experiments of Prof. T. Laitinen, as reported at the Stockholm International Congress against Alcoholism, shows the effect of small doses of alcohol in increasing the susceptibility of animals to infectious diseases and the lowering of the vitality of their offsprings. To the International Congress mentioned above, our government sent two representatives of the medical profession, Dr. Macnicoll of New York, and Dr. T. D. Crothers of Hartford, Conn.

A substantial advance has been made in the study of inebriety and other narcotic drug habits by the organization of the Scientific Temperance Federation of Boston, Mass. This is directed by the leading physicians and other scientific men of New England. Many valuable books, pamphlets, papers and other studies in this field which in the past had too limited usefulness, simply because they are not kept on file, and the facts were not brought to the attention of the general public by some central independent agency, failed of their purpose. There was need, therefore, of a trained acquaintance with the publications and help of disassociated workers which would at once refer the inquirer to the particular facts he wished, and could turn all useful information on these subjects into every possible channel into which it could reach the people. The Scientific Temperance Federation was organized to meet this need. What has been done by a campaign of education towards stamping out

typhoid fever, malaria, tuberculosis, and other preventable disease can be done to a large extent with alcoholism and narcotics, when the physicians take hold of these questions with the same energy and with conviction born of thorough acquaintance with the progress of scientific inquiry. Another very practical aid to the medical profession interested in this department is the *Journal of Inebriety*, published by the Scientific Temperance Federation with Dr. Crothers of Hartford, Conn., as the editor. This is the most scientific and helpful journal published in the English language on the prevention, care and treatment of those addicted to drug habits. The number of papers published in our medical journals on the subject of inebriety and morphin and the cocain habits has been greater during the past year than ever before. The cocain habit, especially in our larger cities, is very rapidly on the increase and the writer is reliably informed that systematic effort is being made, for commercial reasons, to extend the use of this drug throughout the country. Medical men need to be on their guard and if preventive legislation could be secured it would prove a blessing to humanity. The thirty-eighth annual meeting of the Society for the Study of Alcohol and Other Narcotics, held in connection with the meeting of the American Medical Association at Chicago, was by far the largest held during the 38 years of its history. Many carefully prepared papers were read and addresses were given by physicians who have filled the highest offices in the American Medical Association. Not only through the medical press, during the past year, has the subject of inebriety received more careful consideration than ever before, but literary and educational journals and even our daily newspapers have given the subject more extensive notice than ever before. The results of scientific investigation have been given to the general public more fully than during any previous year. It is well known by all physicians that the laws of every State in the Union require the teaching of the effects of alcohol and other dangerous drugs on the human body, in our public schools. This is certainly laying the foundation for intelligence as regards the danger of forming the destroying drug habit. Our nation has not only become a world power, recently, in a commercial and diplomatic way, but has also become an educational world power. For only very recently have the leading countries of Europe framed their Scientific Temperance educational laws after those of the United States.

We certainly commend the excellent paper just read setting forth the necessity for a hospital for inebriates in Indiana. It is true, as the author says, that the best efforts of physicians are rendered useless because we can not control this class of patients. The plan as outlined for a State Hospital is certainly commendable. The humanitarian and financial reasons he gives are strong. In nearly half of the States in the Union the various legislatures have passed some law looking toward the care and restoration of this unfortunate class. A few States have built and equipped hospitals for their treatment. Others have provided for the appointment of guardians with power to send to private hospitals the habitual inebriate but not at the expense of the State. Others have provided that an habitual inebriate may be sent to a State insane asylum. Still other States permit the treatment of the habitual drunkard at the expense of the State, restricting the expense to \$25 a week or even \$100 for the entire

treatment of the patient. The Superintendent of the Massachusetts Hospital cites the fact that inebriates to be treated in the insane asylum contribute very largely to the establishment of a State Hospital for Inebriates. I am reliably informed that at least one of our hold-over senators has a bill prepared now to be introduced at the next session of our State Legislature looking to the establishment of such a State institution. Your Committee on Inebriety has had bills prepared at least twice, ready to be introduced, to establish a State Inebriate Hospital; but the strong plea for an epileptic hospital and a hospital for the treatment of tuberculosis, both of which were needed, led us to withhold these bills in favor of those other institutions. Something will soon be done in Indiana in this direction and certainly the directing wisdom of the medical profession is needed that the best possible means and plans should be adopted.

H. J. HALL.
C. A. DAUGHERTY.
J. H. GREEN.
M. F. GERRISH.
AUSTIN FUNK.

Committee.

REPORT OF COMMITTEE ON TUBERCULOSIS.

Mr. President and Members of the House of Delegates:

The great movement against tuberculosis is now most thoroughly established in every country. The facts concerning the prevalence of tuberculosis and the factors known to be chiefly responsible for its so universal prevalence, as well as the essential matters in the great fight against it, have been reviewed by former committees of this organization and are also being very thoroughly treated by professional and lay publications of the day.

While there is still much discussion upon the transmission of bovine tubercle bacilli to the human being and vice versa, it is now pretty well acknowledged that in man this disease has a double etiology, being caused by either or both the human and bovine bacilli, and that in most cases both are present with the human predominating; also that the action of these two bacilli is somewhat antagonistic, causing a more or less chronic course, while on the other hand those cases in which only one variety is found, are the most virulent and most difficult to treat. Each of these varieties is best treated with its own tuberculin.

It is also noticed that the bovine bacillus is more often found in the parts of the body distant from the air passages—namely, in the lymph glands, bones, etc. Pathologists are still divided as to whether the mode of entrance is chiefly by inhalation and through the post nasal cavity, pharynx and alveoli or by the ingestion of food and through the gastrointestinal tract. Much progress has been made in the early diagnosis of tuberculosis, and this is most important for the successful treatment. Not only has much emphasis been laid upon the clinical findings, but additional tests have been developed either for diagnosis or confirmation—namely, the opthamo tuberculin test of Calmette, the cutaneous or vaccine test of Pirquet, and the precutaneous or inunction test of Moro. While sufficient data has not been collected to speak definitely of these different tests, yet they have been used in sufficiently large numbers of cases to prove themselves of great value. There has also

been a remarkable revival of interest in the use of tuberculin both as a diagnostic and therapeutic agent.

New impetus has been given to the theory of latent tuberculosis dating from childhood, which calls for closer attention to the upper air passages and the prompt removal of offending tonsils, adenoids and other pathological conditions. Medical inspectors to the public schools are common to some of the larger cities.

The Secretary of the State Board of Health and others have spent much time in lecturing before farmers' institutes, labor organizations and social clubs during the past year, with a greatly increasing demand for their services, and many health bulletins have been distributed among these audiences and to the general public elsewhere. Arrangements have been made with public school superintendents of some of the cities and counties of the state for talks to the pupils upon health and hygiene.

We are yet in the beginning of a great campaign of education, but we are behind many of our sister states. The Pennsylvania Legislature has, at its last session, appropriated \$1,000,000 for the benefit of this cause; \$600,000 for the establishment and maintenance of one or more sanatoria and \$400,000 for the establishment and maintenance of dispensaries, dissemination of knowledge and for the study of the social and occupational conditions. The State of Ohio has under construction a sanatorium for incipient cases, and the last legislature passed an act providing for a hospital in each county for chronic cases of tuberculosis. Many other states are taking similar steps, but probably the most effective work is being done in the southwestern part of the United States, Colorado, New Mexico, Arizona and California, for no place is more concerned in this question of the helpless consumptive, there being yearly an overwhelming influx of sick and poor people whose own states immediately cease to be in any way responsible for their support. They realize that the immediate problem in the fight is the disposition of the helpless consumptive, both on humanitarian grounds and in the interests of public safety.

Tuberculosis finds victims among all classes, but it is essentially a disease of poverty with its necessary concomitants—ignorance and filth—and from these culture grounds the germs are flung broadcast to spread the infection in more favored places. No one thing, not even war itself, is so great a drain on the resources of the country. It is estimated to disable one-quarter to one-third of the population at the productive periods, i. e., between 15 and 45 years. Its victims represent a great army withdrawn from the active productive forces of the country; and in the very nature of things more than half this army must be supported by charity, public or private.

This is the keynote of the problem. Science may very well be able to stamp out the disease entirely, but the proper means must be provided and the victims must be placed in favorable surroundings and maintained there under favorable conditions until they are cured or until death renders them no longer a menace and a source of infection to others. How best this may be done is a question that confronts the whole world as well as every individual country. In no part of the world has it been met adequately and in each country the course of action must be guided by the sum of existing conditions. But in the ulti-

mate consideration it is too large for private charity; or for sectional control. It is so deeply rooted in our social fabric that it demands the attention of society as a whole, and must have municipal, state and national aid. It comes as truly within the province of the general government as the repelling of an army of invasion. And if 10,000,000 American citizens or 5,000 citizens of Indiana to-day were threatened with death by a foreign power, the whole country would arm and rise to meet the emergency; no city or community would be left to protect itself as best it could; but a systematic campaign, based on all obtainable knowledge of the invader, as well as the forces available against him, would be pushed to the utmost.

The victory over yellow fever and smallpox, the losing battles with typhoid fever, diphtheria and consumption, and the misuse of relief means in recent great calamities prove that we need a department of Public Health as seriously as we need a department of Agriculture or Commerce and Labor. Since the "greatest asset of a people is the health of its citizenship," is it not time this department should be created? Until we have such a department to battle systematically with tuberculosis, the control of it can be only local and temporary, but the fight must be carried on with whatever means are available. We can not pass it by with indifference because we are very deeply concerned both financially and physically.

To-day the sanatorium is recognized as one of the greatest factors in the warfare against tuberculosis.

Every individual cured in such an institution as well as many who are only improved will cease to be a danger to his friends. Humanity, therefore, demands that the state sanatoria be established, that the afflicted may be cured and that the "great white plague" may not be transmitted to others and handed down to the next generation as one of the great sins of this. The state sanatoria are important educational centers, where object lessons in the prevention of tuberculosis are given, and whose patients taken from the homes of the poor where their friends could scarcely help becoming infected, are placed under hygienic conditions to be cured, if possible; and if not cured they are at least taught how not to be a danger to their fellows. They are also taught that fresh air, regular habits and careful living have much to do, not only with curing the disease or prolonging life, but also with preventing the spread of the disease. The individuals treated in these institutions return home as missionaries teaching that fresh air and better living are necessary to life. Every one returned from state sanatoria is a power for the prevention of tuberculosis. This state has purchased a tract of land in Park county, but as yet it has appropriated no money for the erection of buildings.

This committee most earnestly pleads with every physician in the state to put forth his untiring energies, by way of political influence, social relationship, or otherwise to encourage this work until tuberculosis, like yellow fever, shall cease to be a source of suffering and sorrow and deprivation to ourselves and our fellowmen.

J. A. LITTLE,
E. P. EASLEY,
C. H. EMERY,
CHARLES R. SOWDER,
A. M. COLE.

Committee.

REGISTRATION AT THE FRENCH LICK SESSION.

Total Number, 312.

G. H. Kamman, Seymour.	W. R. Boggs, Salem.
Fred Heller, Brownstown.	Chas. N. Murphey, Salem.
Neal Matlock, Medora.	Jane M. Ketcham, Indianapolis.
G. W. Copeland, Moorefield.	C. D. Ryan, Cross Plains.
Wm. N. Wishard, Indianapolis.	G. T. Beckett, Versailles.
J. Rudolph Yung, Terre Haute.	M. Joseph Coomes, Batesville.
B. O. Howell, Laporte.	W. N. Thompson, Sullivan.
H. H. Martin, Laporte.	H. W. Shirley, Shoals.
George Knapp, Vincennes.	W. L. Gilkison, Loogootee.
Geo. J. Cook, Indianapolis.	W. D. Martin, Bloomington.
Geo. F. Lewis, Asherville.	C. D. Luckett, English.
J. B. Duncan, Bedford.	A. I. Donaldson, Washington.
G. F. Holland, Bloomington.	Vance May, Washington.
M. F. Gerrish, Seymour.	David W. Stevenson, Richmond.
Albert E. Bulson, Jr., Ft. Wayne.	Albert E. Sterne, Indianapolis.
B. D. Myers, Bloomington.	J. M. Dimmen, Ft. Wayne.
A. B. Knapp, Washington.	F. C. Heath, Indianapolis.
O. K. McDi-trick, Washington.	M. F. Boulder, Frankfort.
Jacob V. Baker, Harrodsburg.	George D. Kahlo, French Lick.
J. V. Reed, Indianapolis.	R. E. Troutman, Logansport.
T. V. Keene, Indianapolis.	M. A. Spink, Indianapolis.
T. F. Spink, Washington.	Geo. H. Grant, Richmond.
John J. Kyle, Indianapolis.	A. L. Ziliak, Princeton.
Henry Herr, Washington.	R. S. Anderson, Princeton.
W. D. Schwartz, Portland.	J. W. McGowan, Oakland City.
J. O. Dickes, Portland.	Chas. A. Miller, Princeton.
Thomas J. Dagan, Indianapolis.	J. L. Morris, Princeton.
Allison Maxwell, Indianapolis.	F. M. Payne, Princeton.
F. G. Grisier, Columbia City.	Wm. Cluthe, Tell City.
Geo. W. Willeford, Washington.	C. M. Brucker, Tell City.
C. E. Harris, Bloomington.	M. Robinson, Dubois.
T. A. Hays, Bruns City.	S. P. Sherer, Indianapolis.
Augusta F. Knoefel, Linton.	R. B. Dugdale, South Bend.
L. B. Hill, Seymour.	W. W. Sloan, French Lick.
K. K. Wheelock, Ft. Wayne.	Edwin Walker, Evansville.
J. H. Ford, Indianapolis.	J. F. Weathers, New Albany.
J. K. Ritter, Seymour.	F. H. Wileox, New Albany.
F. A. Van Sandt, Bloomfield.	H. E. Yose, Vallonia.
H. O. Bruggeman, Ft. Wayne.	S. L. Lingle, Paoli.
Helene Knabe, Indianapolis.	L. Lindley, Paoli.
M. H. Kuteh, Terre Haute.	W. H. Gilbert, Evansville.
J. L. Freeland, Indianapolis.	Robt. E. Baker, Orleans.
G. W. Combs, Indianapolis.	E. P. Easley, New Albany.
W. M. Varble, Jeffersonville.	Wm. Moore, New Albany.
J. A. Little, Logansport.	F. P. Hunt, Leipsie.
G. W. Thompson, Winamac.	M. P. Hallingworth, Princeton.
C. F. Briggs, Sullivan.	L. E. Grant, Marengo.
C. S. Black, Warren.	D. V. McClary, Dale.
E. E. Mitchell, Bedford.	A. M. Hayden, Evansville.
Chas. P. Lenthart, Galena.	S. L. Carson, Lincoln City.
H. C. Sharp, Jeffersonville.	Thomas Eastman, Indianapolis.
A. G. Wollenmann, Ferdinand.	D. E. Taylor, Velpen.
H. G. Weiss, Rockport.	H. A. Moore, Indianapolis.
W. L. McClain, Scottsburg.	J. H. Oliver, Indianapolis.
	G. W. McCaskey, Fort Wayne.
	A. W. Dierking, Colitic.
	S. F. Teaford, Paoli.
	S. B. Montgomery, Cynthiana.
	B. A. Rose, Linton.
	H. C. Lowder, Bloomfield.

- Chas. F. Hope, Coatsville.
 C. A. Daugherty, South Bend.
 J. W. Bates, Broad Ripple.
 G. W. H. Kemper, Muncie.
 G. Reynard, Union City.
 J. C. Webster, Lafayette.
 W. R. Moffett, Lafayette.
 Geo. B. Lake, Wolcottville.
 Chas. H. McCully, Logansport.
 George R. Green, Muncie.
 R. E. Holder, Columbus.
 M. M. Lairv, Lafayette.
 K. C. Hershey, Carmel.
 George Revis, Lafayette.
 D. F. Lee, Indianapolis.
 John F. Barnhill, Indianapolis.
 D. J. Cummings, Brownstown.
 A. B. Cray, Monticello.
 P. G. Foust, Santa Fe.
 M. Rosenthal, Ft. Wayne.
 Edgar Cox, Kokomo.
 H. A. Fox, Gosport.
 J. L. Thompson, Indianapolis.
 J. N. Hurty, Indianapolis.
 Geo. T. McCoy, Columbus.
 C. H. English, Ft. Wayne.
 L. Burrage, Lafayette.
 G. D. Miller, Logansport.
 A. L. Palmer, Logansport.
 W. J. Mitchel, North Vernon.
 James H. Green, North Vernon.
 W. H. Stemm, North Vernon.
 L. O. Carson, Traders Pt.
 J. C. Blossom, Mt. Summit.
 C. M. Harris, Bourbon.
 H. G. Niernan, Ft. Wayne.
 B. M. O'Brien, New Winchester.
 W. J. Sandy, Martinsville.
 Geo. Rowland, Covington.
 T. J. O'Brien, Stilesville.
 G. O. Barnes, Seymour.
 Joseph R. Eastman, Indianapolis.
 T. O. Armfield, Elwood.
 A. L. Wilson, Indianapolis.
 J. L. McElvoy, Darlington.
 Clarence Abbott, Otwell.
 W. S. Campbell, Lafayette.
 J. B. Garber, Dunkirk.
 C. H. Tomlinson, Cicero.
 W. W. Hoggatt, French Lick.
 W. B. McDonald, New Augusta.
 F. D. Norton, Columbus.
 G. B. Hammond, English.
 B. J. Moffitt, Lafayette.
 Fred R. Gobbel, English.
 C. F. Neu, Indianapolis.
 W. J. Norton, Hope.
 W. T. S. Dodds, Indianapolis.
 F. B. Wynn, Indianapolis.
 Moses Thorner, Indianapolis.
 L. W. Smith, Wabash.
 George Keiper, Lafayette.
 Walter N. Sharp, Indianapolis.
 David C. Peyton, Jeffersonville.
 W. M. Helms, Williamsburg.
 J. N. Hess, New Marion.
 W. W. Wadsworth, Muncie.
 Robt. Hessler, Logansport.
 J. H. Clark, Connersville.
 James L. Gilbert, Logansport.
 Chas. E. Cottingham, Indianapolis.
 Goethe Link, Indianapolis.
 Wm. R. Cravens, Bloomfield.
 O. A. Rea, Culver.
 R. H. Ritter, Indianapolis.
 A. B. Graham, Indianapolis.
 N. D. Cox, Spencer.
 Thomas Noble, Indianapolis.
 W. Schell, Terre Haute.
 J. H. Christie, Canaan.
 Joseph H. Weinstein, Terre Haute.
 G. R. Hazlewood, English.
 W. R. Mattox, Terre Haute.
 O. R. Spigler, Terre Haute.
 N. W. King, Taswell.
 Alice L. Hobbs, Indianapolis.
 Chas. Chittick, Frankfort.
 L. L. Ball, Muncie.
 H. A. Cowing, Muncie.
 Wm. P. Harter, Anderson.
 L. L. Whitesides, Franklin.
 David Ross, Indianapolis.
 L. J. Vaughan, Topeka.
 W. A. Spurgeon, Muncie.
 E. S. Imel, Petersburg.
 C. W. Dowden, West Baden.
 W. C. Sherwood, Mitchell.
 J. D. Byrns, Mitchell.
 Earl Miller, Indianapolis.
 C. Kennedy, Shelbyville.
 R. H. Leavitt, Terre Haute.
 E. D. Clark, Indianapolis.
 Wilmer, Christian, Indianapolis.
 Wm. S. Tomlin, Indianapolis.
 F. F. Hutchins, Indianapolis.
 E. S. Knox, Indianapolis.
 John Little Morris, Columbus.
 A. C. Kimberlin, Indianapolis.
 H. E. Gabe, Indianapolis.
 G. W. Brown, Frankfort.
 T. L. Loekhart, Owensville.
 J. R. Montgomery, Owensville.
 M. G. Yocum, Mentone.
 W. J. Leach, New Albany.
 J. W. Phares, Howell.
 Chas. C. McFarlin, Zenas.
 E. Derbyshire, Connersville.
 E. R. Luckett, Marengo.
 J. R. Dillinger, French Lick.
 H. R. Allen, Indianapolis.
 E. J. Libbert, Aurora.
 E. D. Freeman, Osgood.
 Maurice Krebs, Huntington.
 H. R. Shotts, Nebraska.
 S. B. Elrod, Henryville.
 C. E. Holton, Holton.
 H. R. Luckey, Seymour.
 R. J. Danner, Elora.
 J. G. Hoover, Boonville.
 L. T. Cox, Napoleon.
 A. R. Logan, Algiers.
 W. S. Garrison, Temnyson.
 S. V. Wilking, Roanoke.
 E. G. Lukemever, Huntingburg.
 T. W. Swarts, Huntingburg.
 Chas. Barnett, Ft. Wayne.
 A. May, Crothersville.
 C. E. Boyd, West Baden.
 E. O. Daniels, Marion.
 J. V. Bower, Malott Park.
 T. W. DeHass, Indianapolis.
 S. E. Earp, Indianapolis.
 J. Kolmer, Indianapolis.
 C. B. Harpole, Evansville.
 J. A. Toliver, French Lick.
 A. J. McDonald, Bedford.
 Chas. A. White, Danville.
 A. Gertrude Wolferman, Indianapolis.
 J. W. Benham, Columbus.
 S. Cook, Gentryville.
 S. L. McPherson, Montgomery.
 F. F. Tournier, Bloomington.
 U. G. Kelso, Dubois.
 E. F. Steinkamp, Haysville.
 Geo. T. Williams, Crawfordsville.
 B. P. Weaver, Ft. Wayne.
 A. W. Brayton, Indianapolis.
 C. E. Stone, Shoals.
 M. F. Porter, Ft. Wayne.
 J. T. McFarlin, Williams.
 F. R. Maxwell, Martinsville.
 J. W. Hadley, Shelbyville.
 N. W. Clark, Rossville.
 J. De Motte, Odon.
 G. M. Freeman, Shoals.
 Claude Dollens, Avoca.
 Chas. E. Rariden, Bedford.
 C. N. Combs, Terre Haute.
 T. C. Dollens, Trinity Springs.
 J. P. Salb, Jasper.
 J. A. Salb, Indianapolis.
 H. C. Knapp, Huntingburg.
 E. P. Easley, New Albany.
 P. T. Oliphant, Buena Vista.
 H. J. Hall, Franklin.
 L. F. Lowder, Bloomington.
 P. J. Bares, Crawfordsville.
 C. L. Boyd, Paoli.
 R. C. Peare, Bellmore.
 C. P. Cook, New Albany.
 W. F. Hughes, Indianapolis.
 J. A. Gibbons, Mitchell.
 P. H. Snoen, New Midletown.
 F. R. Royer, North Salem.
 A. M. Cole, Indianapolis.
 P. Woolery, Heltonville.
 J. A. McDonald, Indianapolis.
 Charles R. Sowder, Indianapolis.
 H. E. Phares, Shelbyville.
 C. E. Laughlin, Evansville.
 G. E. Denny, Madison.
 L. E. Lukemeyer, Huntingburg.
 S. W. Stuteville, Frankfort.
 H. Harter, Newtonville.
 W. D. Hostins, Indianapolis.
 G. B. Jackson, Indianapolis.
 Willard Parrish, Shelbyville.

The American Medical Association.

Chicago Session.

The Fifty-ninth Annual Session of the American Medical Association was held in Chicago, June 2 to 5. For the first time since the St. Paul meeting in 1901 the Association met in the center of the country. To this fact, as well as to the greatly increased membership in the last few years, is due the large attendance. In the four days of the session 6,447 members were registered. Including those Chicago members who did not register, there were at least 500 in attendance whose names do not appear on the registration list. The actual attendance would not fall far short of 7,000. Adding at least 10,000 guests, exhibitors, etc., makes the actual number of persons in attendance about 17,000.

The House of Delegates was called to order on Monday morning at 10 o'clock, by the President, Dr. Joseph D. Bryant of New York, who in his presidential address commended the work of the Council on Pharmacy and Chemistry as well as that done by

Dr. McCormack in educating the public. He also recommended that a standing committee be established to elaborate the ethical principles underlying the practice of medicine and that general instruction in ethical medicine be made a part of the undergraduate course. He dwelt particularly on the efforts now being made to restrict animal experimentation and recommended action by the House of Delegates on this subject. Dr. Bryant also called attention to the invitation extended by President Roosevelt to him as President of the American Medical Association, to take part in the Conference recently held at Washington on the Conservation of Natural Resources.

The report of the General Secretary showed that the membership of the Association on May 1, 1908, was 31,343, a net gain for the past year of 3,828.

The report of the Board of Trustees included the customary report from the auditing company, showing that the entire business for the fiscal year of 1907 was \$385,030.89; that the total expenditures of the year had amounted to \$356,222.21, leaving a net revenue for the year of \$28,808.68. The report showed that during 1907, 2,715,293 copies of *The Journal* had been issued, forming a weekly average of 52,217, an increase of 12½ per cent. over 1906.

The Committee on Medical Legislation reported that the Army Medical Reorganization Bill and the Carroll-Lazear Pension Bills had become laws during the last session of Congress. The importance of uniform and adequate state legislation on the practice of medicine and the preservation of public health was emphasized as well as the necessity of careful study of the problems involved. The Committee recommended that pending the completion of the work now being done only those changes in existing laws which are imperatively needed should be attempted by State Associations. The formulation of the Vital Statistics Bill endorsed by the United States Census Department, the American Public Health Association, the Conference on Uniform State Laws of the American Bar Association and the American Statistical Association, was reported and the endorsement of the House of Delegates was asked for this measure. The report of the Chicago Conference on Medical Legislation was also given.

The Council on Medical Education reported that the work of the Council during the past year has been along the following lines:

1. The inspection and classification of medical colleges as (a) acceptable, (b) doubtful and (c) unsatisfactory.
2. The conducting of an annual conference with representatives of state examining boards and leading educators for the discussion of the important problems of medical education and medical licensure.
3. The collection and compilation of data regarding (a) medical college students and graduates, and (b) regarding results of state license examinations.
4. A thorough investigation of preliminary and medical education in Europe.
5. Working for the advancement of the requirement of preliminary education in the United States to include a year's work in physics, chemistry, biology and modern languages.
6. Obtaining accurate information regarding high schools and universities in their relation to medical education.

The Board of Public Instruction reported that it had secured a Secretary, Dr. R. Max Goepp of Philadelphia, and that it was considering the establishment of lecture systems and of state boards of public instruction and intended to publish articles in the magazines and public press for the enlightenment of the public on disease.

The Committee on Ophthalmia Neonatorum advised the enactment of laws in each state regarding the registration of births and placing the control of midwives in the hands of the boards of health; that health boards distribute circulars to midwives and mothers on the dangers and prophylaxis of this disease; that state and local boards of health prepare and distribute proper prophylactic solutions with specific directions for their use; that proper records be maintained in all hospitals in which children are born; that periodic reports be made by all physicians to boards of health; that concerted effort be made along the lines of public education throughout the country. This report was approved by the chairmen of the Sections on Ophthalmology, Obstetrics and Diseases of Women and Hygiene and Sanitary Science.

The Committee on Scientific Research recommended the appropriation for the assistance of each of the following:

Drs. D. J. McCarthy and M. K. Myers, Philadelphia, "An Experimental Study of Cerebral Thrombosis."

Dr. Karl Voegtlin, Baltimore, "Chemistry of the Parathyroid Glands."

Dr. Isabel Herb, Chicago, "A Study of the Etiology of Mumps."

Drs. R. M. Pearce, Albany, N. Y., H. C. Jackson and A. W. Elting, "A Study of the Elimination of Inorganic Salts in a Case of Chronic Universal Edema of Unknown Etiology with Apparent Recovery."

Dr. H. T. Ricketts, Chicago, "An Investigation of the Identity of the Rocky Mountain Fever of Idaho with that Found in Western Montana."

On Tuesday afternoon, at the third meeting of the House, the reports of the Reference Committees were taken up, the reference committee on Medical Education approving the work of the Council on Medical Education and recommending that it be continued. The Reference Committee on Reports of Officers recommended the appointment of a committee of five to consider the elaboration of the Principles of Ethics. Resolutions condemning the legislative efforts to restrict animal experimentation were presented. The action of the Board of Trustees in preparing the second edition of the Directory was approved. The Reference Committee on Legislation and Political Action recommended the approval of the model law for vital statistics, which recommendation was adopted. The resolution presented by Dr. A. T. McCormack of Kentucky, requesting all State Associations publishing or controlling medical journals to restrict advertisements to such preparations as were approved by the Council on Pharmacy and Chemistry was adopted. A committee of three to confer with a like committee from the American Pharmaceutical Association in regard to drug stores was authorized. The candidacy of Dr. C. A. L. Reed, of Cincinnati, for the United States Senate, was endorsed.

On Thursday afternoon the annual election took place with the following results:

President—Dr. William C. Gorgas, Ancon, Panama.

First Vice-President—Dr. Thomas Jefferson Murray, Butte, Mont.

Second Vice-President—Dr. John A. Hatchett, El Reno, Okla.

Third Vice-President—Dr. Thomas A. Woodruff, Chicago, Ill.

Fourth Vice-President—Dr. E. N. Hall, Woodburn, Ky.

General Secretary—Dr. George H. Simmons, Chicago, Ill., re-elected.

Treasurer—Dr. Frank Billings, Chicago, Ill., re-elected.

Trustees to serve until 1911—Dr. Wisner R. Townsend, New York; Dr. Philip Mills Jones, San Francisco; Dr. William T. Sarles, Sparta, Wis.

The following were elected honorary members: Dr. Edward F. Schaefer, Edinburgh, Scotland; Dr. August Martin, Griefswald, Germany; Dr. E. Treacher Collins, London, England.

The Committee on Transportation and Place of Session recommended Atlantic City as the next meeting place, which choice was agreed to by the House of Delegates. The Reference Committee on Legislation and Political Action reported, requesting the Committee on Medical Legislation to arrange for a conference with the Committee of One Hundred, the Surgeons-General of the Army, Navy and Public Health and Marine-Hospital Services with a view to securing co-operation on the establishment of a National Department of Health. After the transaction of some routine business the House adjourned.

One hundred and thirty-four members of the House were present out of a total membership of one hundred and forty-two.

The social events of the week were particularly attractive. On Monday night the secretaries of the state associations and the editors of the state journals met at dinner and completed the organization of a State Secretaries and Editors Association. A dinner to foreign guests, as well as a number of other social events, also occurred on Monday evening. On Tuesday evening twenty-seven alumni dinners were held in the various hotels and restaurants throughout the city, the largest being that of Northwestern University Medical School, held at the Illinois Athletic Club, at which over 800 alumni were present. On Wednesday evening the President's reception and ball was held at the Coliseum, thousands of members and guests being present. On Thursday evening the local profession tendered the members of the Association a smoker at the Coliseum at which the attendance amounted to about 8,000. Numerous social attractions were provided during the day for the ladies and guests, including receptions at the South Shore Country Club, Chicago Woman's Club, etc. The sections were all largely attended and the programs were of a high order. The session was in every way the most noteworthy of any which has yet been held and it is anticipated that some years will elapse before the record established will be surpassed.

INDIANA PHYSICIANS REGISTERED AT THE CHICAGO SESSION.

Ainsley, Robert, Indiana Harbor.
Allen, H. R., Indianapolis.
Ambrose, U. C., Connersville.
Ash, E. E., Goshen.
Aspinall, Novitas B., Plymouth.
Austin, Maynard A., Anderson.
Austin, F. H., North Madison.

Barens, Paul J., Crawfordsville.
Barnett, Charles E., Ft. Wayne.
Barnhill, John F., Indianapolis.
Bartholomew, A. C., Logansport.
Bechtol, A. C., Marion.
Belt, Richard, West Terre Haute.
Berteling, John B., South Bend.
Bicknell, I. J., Goshen.
Bird, Charles R., Greensburg.
Bishop, Mumford Eugene, Indianapolis.
Bitting, A. W., Lafayette.
Black, Frank W., Ligonier.
Blinks, E. G., Michigan City.
Blount, R. D., Valparaiso.
Blue, C. L., Toesin.
Boggs, W. R., Salem.
Bonell, B., Laporte.
Bosenbury, Chas. S., South Bend.
Botts, Edwin H., Zanesville.
Bower, G. B. M., Fort Wayne.
Bowers, Whitfield, Michigan City.
Boyd-Snee, Harry, South Bend.
Bradfield, John, Logansport.
Bramkamp, Allan L., Richmond.
Brannon, G. D., Crown Point.
Brayton, A. W., Indianapolis.
Broughton, F. H., Wolcottville.
Broughton, Frank, Waterloo.
Brokaw, R. E., Portland.
Brose, L. D., Evansville.
Brndi, G. G., New Haven.
Bryan, T. A., Plainfield.
Buck, Dexter A., Laporte.
Buchanan, William Austin, Hammond.
Bulson, Albert E., Jr., Ft. Wayne.
Bulla, M. S., Gas City.
Butterworth, C. M., South Bend.
Caffee, Bennett V., Terre Haute.
Calvin, W. D., Ft. Wayne.
Cameron, V. V., Marion.
Campbell, C. W., Hammond.
Carnelley, James H., Kokomo.
Carey, Willis W., Ft. Wayne.
Carson, L. O., New Augusta.
Caylor, Chas. E., Pennville.
Chittiek, Chas., Frankfort.
Clark, Edmund D., Indianapolis.
Clark, J. H., Connersville.
Clark, Stanley A., South Bend.
Clapp, Fred R., Ligonier.
Clevenger, William F., Indianapolis.
Cline, L. C., Indianapolis.
Clouse, B. A., Columbus.
Cochran, Robert W., Madison.
Cole, Albert M., Indianapolis.
Collins, C. C., Roachdale.
Cook, Charles P., New Albany.
Cook, George J., Indianapolis.
Cook, L. H., Bluffton.
Combs, Charles N., Terre Haute.
Combs, Geo. W., Indianapolis.
Copeland, Chas. C., North Madison.
Corsen, J. C., Valparaiso.
Cowen, Lewis C., Rising Sun.
Cox, Edgar, Kokomo.
Crampton, Chas. C., Delphi.
Crawford, Chas. Lee, Vevay.
Cronier, Mary C., Union City.
Cromer, L. G., Union City.
Crull, E. A., Ft. Wayne.
Culbertson, Scott, Vevay.
Current, O. E., Farmland.
Cuthbert, F. S., Kingman.
Dancer, Charles R., Ft. Wayne.
Darroch, S. C., Cayuga.
Darroch, W. P., Cayuga.
Daugherty, Chas. A., South Bend.
Defrees, H. J., Nappanee.
Denant, M. S., Walkerton.
Dewey, E. L., Whiting.
Dewey, F. N., Elkhart.
DeWees, Roy E., Keystone.
Dielman, F. C., Fulton.
Dickes, John T., Portland.
Dierking, A. W., Oolitic.
Dinsmore, W. H., Kramer.
Doerr, J. E., Mt. Vernon.
Doolittle, B. U., Whiting.
Douglas, Walter, Indianapolis.
DuBois, Franklin L., Liberty.
Dugan, Thomas J., Indianapolis.
Dugdale, R. B., South Bend.
Duncan, J. B., Bedford.
Dryer, D. W., La Grange.
Eberhard, E. L., South Whitley.
Eberhardt, W., Michigan City.
Easley, E. P., New Albany.
Egan, B. W., Flora.
Eckelman, Metius M., Elkhart.

- Eidson, J. W., Bourbon.
 Emery, C. H., Bedford.
 English, C. H., Ft. Wayne.
 Englerth, Perry O., North Judson.
 Epperson, Adah, South Bend.
 Eshleman, L. H., Marion.
 Evans, Edward Everett, Gary.
 Fankboner, W. A., Marion.
 Farver, M. A., Middlebury.
 Flack, O. M., Boswell.
 Fleming, C. F., Wabash.
 Fleming, J. C., Elkhart.
 Foxworthy, Frank W., Indianapolis.
 Franke, W. E., Newton.
 Freeland, J. L., Indianapolis.
 Freeman, E. D., Osgood.
 Frink, C. W., Elkhart.
 Frost, R. F., Huntington.
 Galbreth, W. H., Rockfield.
 Garber, J. B., Dunkirk.
 Gardner, Lucy W., Bloomington.
 Garrett, John D., Indianapolis.
 Gibbons, John A., Mitchell.
 Gibbs, J. C., Crown Point.
 Gilbert, Joseph L., Kendallville.
 Gilbert, Wm. H., Evansville.
 Gillespie, J. F., Greencastle.
 Gilson, Edmon A., Covington.
 Goodrich, C. D., Elkhart.
 Graham, A. B., Indianapolis.
 Graham, Hannah M., Indianapolis.
 Grant, L. E., Marengo.
 Gray, J. Lucius, Laporte.
 Gray, John W., Bloomfield.
 Grayston, B. H. B., Huntington.
 Grayton, W. S., Marion.
 Green, William L., Pekin.
 Greenwell, Franklin, Hometown.
 Greenwalt, G. L., Fort Wayne.
 Grubb, A. G., Mongo.
 Groman, H. C., Hammond.
 Hackley, R. P., Medaryville.
 Hager, W. A., South Bend.
 Hagenbaugh, E. J., Elkhart.
 Hall, H. J., Franklin.
 Hall, H. M., Camden.
 Hankins, Madge P., Terre Haute.
 Hamilton, Allen, Ft. Wayne.
 Hamer, H. G., Indianapolis.
 Hatfield, Sidney J., Indianapolis.
 Hatfield, Isaac N., Bluffton.
 Harris, Cyrus M., Bourbon.
 Harrold, E. O., Marion.
 Hayden, A. M., Evansville.
 Hay, B. F., Syracuse.
 Hays, T. A., Burns City.
 Hays, Woodward H., Albion.
 Heath, F. C., Indianapolis.
 Herr, Henry, Washington.
 Hessler, Robert, Logansport.
 Hicks, L. F., Stilesville.
 Hiestand, H. J., Pennville.
 Hill, H. B., Logansport.
 Hill, J. W., South Bend.
 Hoobs, Alice L., Indianapolis.
 Hoffman, Geo. E., Logansport.
 Holder, R. E., Columbus.
 Holland, P. C., Bloomington.
 Hood, Thomas C., Indianapolis.
 Hoopingartner, G. B., Elkhart.
 Hoover, P. N., Boonville.
 Howard, C. Norman, Warsaw.
 Howat, W. F., Hammond.
 Huff, Oliver N., Fountain City.
 Hughes, W. F., Indianapolis.
 Hughes, W. L., Indiana Harbor.
 Hunt, John S., West Terre Haute.
 Hunter, T. E., Versailles.
 Hurty, J. N., Indianapolis.
 Ingalls, Albert, Elkhart.
 Jackson, J. M., Lyons.
 Jacquith, O. S., Lawrenceburg.
 Jay, M. T., Portland.
 Jeffries, Wm. E., Indianapolis.
 Jennings, Harriett B., Elkhart.
 Johnson, Carl E., Otis.
 Johnston, M. F., Richmond.
 Jones, J. G., Vincennes.
 Jones, Jay J., Medaryville.
 Jones, Hilus E., Clayton.
 Just, Guy H., Buckingham.
 Kahlo, George D., French Lick.
 Kalbfleisch, A. H., Peru.
 Kane, Alfred, Ft. Wayne.
 Kearns, Thomas A., Flora.
 Kelly, J. C., Mitchell.
 Keiper, George Frederic, Lafayette.
 Keith, Freeman E., Modoc.
 Kemper, G. W. H., Muncie.
 Kennedy, T. C., Shelbyville.
 Kerrigan, John J., Michigan City.
 Ketheart, N. I., Columbia City.
 Kime, John F., Petersburg.
 Kimberlin, Albert C., Indianapolis.
 Kimmel, Cecil, Ft. Wayne.
 King, M. O., Rochester.
 King, J. E., Richmond.
 King, Frank A., Garrett.
 Kirk, Elliott W., Veederburg.
 Kitson, F. S., North Manchester.
 Knabe, Helene, Indianapolis.
 Knapp, Geo., Vincennes.
 Knapp, Chas., Evansville.
 Knowlton, Millard, Terre Haute.
 Kohr, Thomas W., Hammond.
 Kremer, Nicholas A., Madison.
 Kuhn, B. F., Elkhart.
 Lake, Geo. B., Wolcottville.
 Lawhead, W. E., Inwood.
 Layman, Daniel W., Indianapolis.
 Leach, W. J., New Albany.
 Leavitt, R. H., Terre Haute.
 Leiter, W. S., Claypool.
 Lemon, H. K., Goshen.
 Libberts, Edw. J., Aurora.
 Linvill, D. S., Columbia City.
 Lloyd, A. W., Marion.
 Long, H. H., Laporte.
 Loop, A. L., Economy.
 Loomis, Chas., Vevay.
 Loomis, John F., Marion.
 Lorenz, John W., Evansville.
 Lowder, Lindsey T., Bloomington.
 Mackey, C. W., Portland.
 Marshall, George Dexter, Kokomo.
 Martin, J. S., Rolling Prairie.
 Martin, Paul F., Indianapolis.
 Marvel, Chas., Richmond.
 Mattison, James A., National Military Home.
 Mattox, Ernest L., Terre Haute.
 Mavity, D. E., Fowler.
 Maxwell, Allison, Indianapolis.
 May, A., Crothersville.
 McAllister, E. B., Terre Haute.
 McBride, James L., Zanesville.
 McCaskey, G. W., Fort Wayne.
 McCaslin, Carl N., Earl Park.
 McConnell, Joseph, Terre Haute.
 McCully, Chas. H., Logansport.
 McDonald, W. B., New Augusta.
 McGaughey, Walter M., Greencastle.
 McGowen, T. J., Vincennes.
 McGrew, H. A., Laporte.
 McHugh, J. E., Ft. Wayne.
 McKeeman, Robert B., Ft. Wayne.
 McKinney, Jas. W., Bluffton.
 McQuown, O. W., Marion.
 Mentzer, S. E., Monroeville.
 Mercer, D. J., Poe.
 Metcalf, J. E., Gary.
 Metts, Fred A., Ossian.
 Meyer, J. H. William, Laporte.
 Miller, H. M., South Bend.
 Miller, Charles A., Princeton.
 Miller, D. L., Goshen.
 Miller, E. D., Logansport.
 Miller, G. W., Covington.
 Mills, C. C., Red Key.
 Mirandi, W. F., Walkerton.
 Mitchell, E. E., Bedford.
 Mitchell, H. F., South Bend.
 Mix, Charles M., Muncie.
 Moore, E. P., South Bend.
 Moore, H. A., Indianapolis.
 Montgomery, H. F., South Bend.
 Morgan, E. E., Ft. Wayne.
 Morris, John E., Indianapolis.
 Morris, Geo. B., Poneto.
 Morrison, Frank A., Indianapolis.
 Mountain, Joseph R., Connersville.
 Mueller, F. M., Lawrenceburg.
 Murphy, O. C., Scottsburg.
 Myers, B. D., Bloomington.
 Myers, Isaac N., Maples.
 Myers, J., Alton.
 Neier, O. C., Indianapolis.
 Newkirk, J. W., Gary.
 Niblack, E. S., Terre Haute.
 Nieschang, Charles C. F., Ft. Wayne.
 Noble, Thomas B., Indianapolis.
 Noble, Sarah A., East Chicago.
 Northrup, A. H., Markle.
 Northrup, A. H., Markle.
 Oliver, J. H., Indianapolis.
 Olney, Thomas A., South Bend.
 Packard, C. W., Gary.
 Page, La Fayette, Indianapolis.
 Page, W. B., Middlebury.
 Pantzer, Hugo O., Indianapolis.
 Pate, J. R., Milan.
 Payne, Alarie T., Terre Haute.
 Pearson, John R., Bedford.
 Peck, Walter M., South Bend.
 Perry, Chas. H., Lewis Creek.
 Peyton, David C., Jeffersonville.
 Pfaff, O. G., Indianapolis.
 Pierce, H. J., Cloverland.
 Pierson, Allen, Spencer.
 Poinier, E. W., Andrews.

- Poland, Ulysses G., Muncie.
 Porter, Miles F., Fort Wayne.
 Porter, J. B., Elkhart.
 Powell, J. Z., Logansport.
 Powell, Nettie B., Marion.
 Preston, H. P., Plymouth.
 Price, C. R., Geneva.
 Prondit, Louis, Osceola.
 Radcliffe, Floyd E., Bourbon.
 Ramsbrok, C. R., Huntingburg.
 Randall, Edwin, Ambia.
 Ranke, Henry, Ft. Wayne.
 Rarick, J. E., Wolcottville.
 Rawles, Lyman Talmage, Huntertown.
 Rea, W. G., Muncie.
 Reed, O. A., Culver.
 Reed, Jewett V., Indianapolis.
 Redding, J. L., Bluffton.
 Reagan, R. M., Monon.
 Repass, Robert, Greenwood.
 Ritter, Mary Thayer, Angola.
 Rhamy, B. W., Ft. Wayne.
 Roark, C. A., Milton.
 Robinson, C. C., Indiana Harbor.
 Robison, Elwood, Ross-ville.
 Robison, John E., Frankfort.
 Rose, B. A., Linton.
 Ross, Alex. A., East Chicago.
 Ross, David, Indianapolis.
 Root, W. W., Parker.
 Rutkauskas, Anthony Kazis, East Chicago.
 Sanders, I. M., Greensburg.
 Sensenich, R. S., South Bend.
 Schneider, A. L., Ft. Wayne.
 Schick, M. F., Ft. Wayne.
 Sehlke, A. G., East Chicago.
 Schuman, O. V., Columbia City.
 Seudder, C. P., Washington.
 Seudder, J. A., Edwardsport.
 Seull, L. Eleanor, Hammond.
 Shafer, W., Rochester.
 Shanklin, Leslie B., Sullivan.
 Sharp, Walter N., Indianapolis.
 Sharret, H. E., Hammond.
 Shaw, S. L., Kimmell.
 Shepherd, Vincent, Dupont.
 Shepherd, George W., Red Key.
 Shoemaker, S. A., Poneto.
 Short, R. B., Union Mills.
 Short, I. Wright, Elkhart.
 Showalter, J. E., Waterloo.
 Shumaker, Wm. F., Butler.
 Slonaker, C. Lee, Leiters Ford.
 Sowder, Charles R., Indianapolis.
 Smith, G. H., Knightstown.
 Smith, Martha J., Indianapolis.
 Snapp, J. A., Goshen.
 Snyder, John Wm., Michigan City.
 Snyder, B. F., Camden.
 Souder, Carl L., Columbia City.
 Spaulding, L. A., Bluffton.
 Spear, Robt., East Chicago.
 Spencer, W. A., Wolcott.
 Spink, Mary A., Indianapolis.
 Spink, Thomas F., Washington.
 Spohn, George W., Elkhart.
 Sprowl, John S., Warren.
 Stauff, Hannah Ophelia, Elkhart.
 Sterne, Albert E., Indianapolis.
 Stevens, B. C., Logansport.
 Stevenson, David W., Richmond.
 Stewart, Charles S., Auburn.
 Stockton, Sarah, Indianapolis.
 Stoltz, Chas., South Bend.
 Stormont, R. M., Stewarts-ville.
 Stout, O. L., Upland.
 Strange, J. W., Loogootee.
 Stroube, C. N., Roachdale.
 Stroup, C. C., Mishawaka.
 Sutherland, P. N., Angola.
 Sutton, H. H., Aurora.
 Swezey, H. N., Marion.
 Tobias, A. W., Elwood.
 Tallman, Homer H., La Paz.
 Taviner, R. Q., Hunting-ton.
 Taylor, J. E., Leopold.
 Terry, C. C., South Bend.
 Thompson, J. L., Indianapolis.
 Thompson, W. H., Winamac.
 Trent, I. N., Muncie.
 Troutman, R. E., Logansport.
 Tucker, Frederick A., Noblesville.
 Van Sweringen, B., Ft. Wayne.
 Van Sweringen, Garrette, Ft. Wayne.
 Van Kirk, G. H., Kentland.
 Varier, J. H., South Bend.
 Ver Wayne, E. J., Evansville.
 Vaughan, I. J., Topeka.
 Vaneleave, R. H., Farmersburg.
 Wade, Frank C., Lima.
 Walker, Edwin, Evansville.
 Ward, J. P., Vevay.
 Ward, J. O., Peru.
 Ward, John P., Vevay.
 Washburn, I. M., Rensselaer.
 Weaver, Benj. Perley, Ft. Whitesides, L. L., Franklin.
 Wayne.
 Weis, Wm. D., Hammond.
 Weinstein, Jos. H., Terre Haute.
 Wells, Edwin M., Whiting.
 Westfall, A. B., Lafayette.
 Wiedemann, F. E., Terre Haute.
 Wiggins, Edward L., Elwood.
 Wiley, Harriet, Portland.
 Wilson, L. A., Kingsbury.
 Wilson, H. W., Michigan City.
 Willeford, Geo. W., Washington.
 Williams, Alice B., Columbia City.
 Williams, L. L., Brazil.
 Williams, W. H., Lebanon.
 Williamson, Harry, Marion.
 Wishard, Wm. N., Indianapolis.
 Whery, Mary A., Fort Wayne.
 Whitelatch, Bine, Pierceville.
 Whitesides, L. L., Franklin.
 Whitsitt, Schuyler A., Kent.
 Wood, H. D., Angola.
 Wood, Theodore F., Angola.
 Woolery, Homer, Bloomington.
 Woolery, Perry, Hiltonville.
 Wolfeman, A., Gertrude, Indianapolis.
 Woodruff, C. A., Ligonier.
 Work, James A., Jr., Elkhart.
 Work, James A., Elkhart.
 Wray, Curtis M., Lafayette.
 Wybourn, D. C., Sheldon.
 Wynn, Frank B., Indianapolis.
 Wyatt, A. R., La Grange.
 Yencer, M. W., Richmond.
 Yenne, C. H., Washington.
 Yoeum, M. G., Mentone.
 Young, Simon J., Valparaiso.

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of May 19, 1908.)

Society met in regular session in the assembly room with 30 members present. President and Vice-President being absent, meeting was called to order by the Secretary. Minutes of previous meeting read and approved.

Gout: Theories of Causation, Clinical Varieties, was the title of the first paper of the evening, by Dr. W. P. Whery. He said that attacks occur mostly at night. Gout is not a local disease, but the local manifestation is the safety valve. Drinking water and plenty of it is the best solvent of uric acid. He said that sodium salts should be avoided in the treatment of gout, even table salt. Among the remedies highly recommended for the treatment of this disease are colchicum and cisticifuga. The hot air apparatus is also of great service. The universal law that everything beneficial generates something detrimental accounts for gout. He said that meat eaters more often have gout, and quoted from history to show that such is the case.

Rheumatoid Arthritis: Etiology, Symptoms, Diagnosis. Paper by Dr. B. Van Sweringen, in which he discussed neuropathic origin, and said that disturbances of sensation, glossy skin, and their symmetrical distribution tend to show that the disease is of neuropathic origin. Organisms have been found that are said to cause the condition. He said that the disease attacks females more frequently, and usually the poorer classes of patients; however, there are exceptions. The condition is said to follow shock. The acute form is most likely to be diagnosed as acute inflammatory rheumatism. He closed with giving an offhand talk concerning the outline as set forth in the postgraduate course.

In opening the discussion Dr. Barnett reported a case of gout in which there was a deposit two inches long in corpora cavernosa in penis of physician.

Dr. Beall said that he had seen one case, which was a case of poor man's gout. There were trophi in the ears. In about 60 per cent. of cases are found trophi in the ears as white kernels. The majority of evidence now leans to the bacteria origin of arthritis deformans. He has seen the spine of one case of spondylitis deformans after dissection.

In closing the discussion, Dr. Whery said that mental and physical strain brought on attacks of gout in London 40 years ago, during his practice there, and not eating and drinking. He said that attacks of gout were used by diplomatists to avoid discussing delicate questions.

Pathology of Seminal Vesicles and Prostate, Preceding Instrumental Epididymitis. was the title of a paper by Dr. Charles E. Barnett, in which he said that gonorrheal epididymitis, like gonorrheal salpingitis, resolves itself from the acute stage after proper treatment in a comparatively short time, but the retained pathology, after resolution has reached the limit, is likely to ever remain a menace during the future life of the individual. The essayist considers that in spite of every precaution taken to prevent infection, there are certain few epididymites that occur after the first sound introduction, especially since the advent of the Kollman dilator, which, in his opinion, is due to disturbance of the pent-up pathology contained in the prostate and seminal vesicles. He considers the Bartholin gland and duct pathology the best comparison with the female compared to the seminal vesicle pathology in the male. In closing, he said "surgery is governed by necessity, and if no other means control vesicular pathology, surgical removal is the necessity for the vesicle, as well as the prostate, when infected."

The discussion was opened by Dr. Drayer. He made a motion, which was carried, that Dr. Barnett's paper be referred to the State Association.

The Board of Censors reported unfavorably on the application of Dr. B. Clark. They reported favorably on the applications of Drs. L. J. Zoeller, R. V. Murray, D. E. Murray, W. H. Thompson, I. N. Myers. Motion was made by Dr. Drayer that the by-laws be suspended and that the Secretary cast ballot of the Society for these men. Seconded and carried.

Motion made that the Fort Wayne Medical Society instruct its delegate to extend an invitation to the State Society to meet in Fort Wayne in 1909. After much discussion the question was laid over until the next meeting.

Dr. Calvin announced the society's committee to meet with druggists' as Drs. Bulson, Morgan and Van Buskirk. Dr. Bulson resigned and Dr. Calvin was appointed in his place.

Motion made that the Society purchase a number of the pamphlets on the Great American Fraud and send them to teachers and clergymen. Motion carried.

Adjourned.

J. C. WALLACE, Sec.

(Meeting of May 26, 1908.)

Society met in regular session in the assembly room with 36 members present. Meeting called to order by Secretary J. C. Wallace. On motion, Dr. H. O. Brugge-man was called on to preside. Minutes of previous meeting read and approved.

Gastric Ulcer. Clinical case report by Dr. B. Van Sweringen. Patient, man, aged 63, in apparently good health, was suddenly taken with pain in the right hypochondrium, and in the back and right shoulder.

He was given hypodermics of morphia to relieve the pain. After resting some the patient vomited. He had vomited several times after the attack started. There was no tenderness in the back on either side of the spine. The character of the pain and the location or distribution pointed to gallstones. Upon examination the next day there was pain in the right hypochondrium, and rigidity in this region, as well as in the region of the appendix. The belly was opened; incision being made so that region of gall bladder and appendix could both be investigated if necessary. The appendix was examined and found to be the seat of the old trouble. It was gotten up with difficulty. Free pus was found in the peritoneal cavity, but as no perforation of the appendix could be found, therefore there must have been some trouble somewhere else, as the pus did not come from the appendix. The gall bladder was palpated, but no stones were found. The incision being enlarged, pus was found coming from the stomach. The opening in the stomach was closed with Lembert sutures, with the intention of making a gastro-jejunostomy later, as the patient was in a very bad condition. Drains were inserted. The operation was done one week ago, and now the patient is doing fairly well.

In opening the discussion Dr. Porter said that it is not necessary to have a perforation of the appendix to account for pus in the peritoneal cavity. The location of the perforation accounts for location of the pain and tenderness. The direction of the least resistance was down to the R. I. fossa, and, therefore, the pus went to that place. He said that there is a larger per cent. of recoveries after perforation in gastric ulcer than in intestinal perforations, as the gastric contents are relatively more sterile than the contents of the intestines. It will be very interesting to note the progress of the case and whether the ulcer will get well.

Dr. English stated that vitality had much to do with the recovery of the patients after a perforation. The vitality of a patient with gastric perforation is much better than those with intestinal perforations such as occur in typhoid fever.

Dietetics in Rheumatism and Gout, was the title of a paper by Dr. A. P. Buchman, in which he said that in the first few days or period of invasion of any disease there is little assimilation, therefore it is wrong to give food. He said that if constructive metabolism is in abeyance, it would seem that foods would be a menace rather than an aid. The personal experience of the essayist has been that patients are without appetite or desire for food, and will not eat unless they are forced to do so by their friends. In certain forms of chronic rheumatism he believes that they do better on restricted diet, such as proteids and water. There is no single dietary which is adapted to every rheumatic case. The author thinks that the least quantity of food is the best, assuming that excessive metabolism is the trouble at the start. If you now cut as withdraw food you cut out future excessive metabolism, and then by getting rid of the products of excessive metabolism you cure the case.

Therapeutic Action of the Salicylates. Paper by W. O. Gross. He said that in order to intelligently study the therapeutic action of salicylates it is important to know something of their composition. (1) What is salicylic acid? (2) How is it obtained? (3) Salts of salicylic acid. (4) Action of salicylates ther-

apeutically. With reference to the first division of the subject, he said that on examination it is found that salicylic acid is an organic acid, existing naturally in combination in various plants, such as strawberries, raspberries, blackberries, currants, plums, black cherries, apricots, peaches, grapes, crab apples, apples and oranges. It is also a constituent element of the oils of wintergreen, birch and other plants of the spiraea family. About 24 years ago Kolbe succeeded in producing salicylic acid at a moderate cost by mixing phenol with carbon dioxide through the instrumentality of sodium. The sodium salt thus obtained is dissolved in water, decomposed by hydrochloric acid, the salicylic acid filtered off, washed and crystallized out of hot water.

In the study of therapy, particularly in regard to the action of salicylates, we are confronted with the ever apparent chemical changes which are constantly occurring in the human body, both in health and disease. When the natural chemical reaction is interfered with through improper food or other causes, the abnormal condition resulting may usually be corrected by the administration of agents acting chemically. While agents other than chemical may, and often do, serve therapeutic purposes, they eventually act chemically or alter the abnormal conditions in the various tissues and organs of the body. The fact that the abnormal conditions can not always be corrected, simply means that the proper reagent has not been employed or that decomposition has so far advanced as to preclude its arrest or change.

In studying the therapeutic action of the salicylates we find that they not only suspend the action of diastase, but also the starch digesting power of the pancreatic secretion. Salicylic acid was originally brought to the notice of the profession on account of its inhibitory influence on putrefaction, as small quantities prevented the souring of milk, and one-fifth of 1 per cent. is sufficient to prevent the development of bacteria in ordinary organic mixtures. This antiseptic power of salicylic acid led to its use in preserving cider. It is largely used in the canning of corn, beans, peas, tomatoes, and other vegetables. When salicylic acid is given to man in doses just sufficient to manifest its presence, symptoms closely resembling cinchonism result. Moderate therapeutic doses appear to have no powerful influence upon the circulation. Such physiological evidence as we have indicating that they increase arterial pressure somewhat by exciting the vasomotor centers and directly increasing the cardiac force. The action of the acid upon the nervous system seems to be a depressant of the motor centers. Moderate doses increase the frequency of respiration, probably in part by an action upon the peripheral pneumogastrics, but chiefly by a direct influence upon the respiratory. It is absorbed and circulates in the blood probably as sodium salicylate, and is eliminated partly unchanged, as a salicylate, and partly as salicyluric acid.

The question of the comparative medicinal value of the artificial and natural salicylic acid is one of great importance to the medical profession. It is an established fact that the artificial acid is more poisonous than the natural acid. According to Dunstan the poisonous properties of the artificial acid are due to the presence of three impurities, the meta, ortho and para-cresotic acid. Of all the salts of salicylic acid, per-

haps the strontium salicylate deserves special mention.

What has been said of the salicylates holds equally true of another very important remedial agent, namely, salol, or technically called phenyl-salicylate. It has been largely used in rheumatism as a substitute for salicylic acid, but it is much less prompt than is that remedy.

The external use of salicylic acid in the strength of 1/1000 makes an ideal application in swellings due to infection. Some of the fake cancer applications contain salicylic acid in combination with other irritants.

In opening the discussion, Dr. B. Van Sweringen spoke on the difference between true and synthetic salicylates, and said that in his personal experience he has been able to see but very little difference. In the treatment of inflammatory rheumatism he has had the most success with salicylate of soda, but very often not until large doses were given. Concerning dietary, he said that he thinks it is unwise to feed during acute symptoms. In chronic forms, where there is nutritional disturbance, the treatment should be pushed as rapidly as possible.

Dr. Drayer stated that in one who has a tendency to abort, the salicylates have a tendency to act as an abortifacient. He says he knows that salicylic acid will increase the menstrual flow, and sometimes bring it on; therefore, we should be careful in using it in pregnant women. Regarding permanent deafness from the use of salicylates, he said that large doses, 15 grains four times a day for a week, produced deafness lasting four months. He said that 30 grains t. i. d. has a decided effect in stopping pruritis of diabetes. In phosphaturia it will clear up urine and stop the reflex nerve pains. It is one of the best drugs in use.

Dr. Pulliam said that the reason sodium salicylate deranges the stomach is that bottles in drug stores allow moisture to get at the medicine and change it, forming sodium hydroxide and salicylic acid. The decomposition of salicylate of soda is what deranges the stomach.

Dr. Weaver stated that Osler is giving salicin in 20 grain doses to children every two hours, claiming less stomach disturbance.

Dr. Wheelock said that acute articular rheumatism is a septic infection and the tonsil is the offender. The value of salicylates resolves itself into that of an analgesic. He gets remarkable results from salicylates given with large quantities of water. As to the physiological effect he says that there is an effect similar to cinchonism, where there is ringing in the ears or fullness. This effect is produced by one drachm in 10 or 12 hours. He said that the best results were secured, not by going beyond this effect, but rather stay this side in using salicylates.

Dr. Buehman said that acute rheumatism is a general toxemia. There is no constructive metabolism during acute invasion period, and it usually takes at least four days after the crisis before we have constructive metabolism. One patient will come into the stage of constructive metabolism earlier or later than another.

Dr. Gross closed the discussion of his paper.

A motion to invite the Indiana State Medical Association to meet in Fort Wayne in 1909 was discussed at length and finally carried.

The following resolution was presented:

Resolved, That after June 30, 1908, the Fort Wayne Medical Society shall discontinue the so-called post-graduate system of instruction. And be it further

Resolved, That the Program Committee of the society be, and hereby is, directed to prepare a program for use after the summer vacation, which program will be similar in its nature to the one in use before the adoption of the postgraduate program.

(Signed.) H. O. BRUGGEMAN.

Motion made and seconded that the above be postponed until the next regular meeting.

Motion made by Dr. Porter, and seconded by Dr. English, that the delegates and members who attend the American Medical Association and State Association meetings attend with a view to reporting matters of interest to the local society on their return. Dr. Drayer seconded the motion, making the amendment that the chair appoint one man for each section. Amendment accepted. Motion as amended carried.

Adjourned. J. C. WALLACE, *Sec.*

CLAY COUNTY.

The Clay County Medical Society met in regular session May 21, at the office of the President, Dr. S. G. Hollingsworth. The applications of Drs. M. A. Freed and H. R. Vandiver of Clay City, C. L. Ray of Cory, J. A. Davis of Coalmont, and Dr. Griffin of Brazil, were presented, and after a favorable report by the Board of Censors, all were received as members of the society.

Motion made and carried that the society have one afternoon and one evening meeting each month, the afternoon meeting to be on the second Thursday, and the evening meeting on the fourth Thursday. A committee, consisting of Drs. Cook, Dilley and Sourwine, was appointed to arrange and publish in advance for the entire year a definite program for each regular session, and to provide an afternoon summer meeting in some central part of the county on the banks of Eel river, to which the doctors' families be invited.

Dr. F. C. Dilley was appointed to secure a regular meeting place in the public library building.

Adjourned. G. W. FINLEY, *Sec.*

CLINTON COUNTY.

Clinton County Medical Society met May 7, at 8:30 p. m., with President George W. Brown in the chair. Minutes of previous meeting read and approved. The first paper of the evening was by Dr. R. H. Ritter, of Indianapolis, on "The Blood." This was followed by a paper on "Strangulated Hernia," by Dr. John H. Oliver, of Indianapolis. These papers were freely discussed by all the members present. At the close of the session the members and invited guests, to the number of thirty, repaired to the Cushwa parlors, where a banquet had been prepared.

Adjourned. CHAS. CHITTICK, *Sec.*

DELAWARE COUNTY.

The regular meeting of the Delaware County Medical Society was held May 1, with 23 members present. The committee appointed to draft suitable resolutions in reference to the death of Dr. William L. Snyder, reported as follows, which was adopted by consent:

WHEREAS, In the untimely death of our friend and co-worker, Dr. William L. Snyder, the medical profession has lost a member whose scholarly attain-

ments, high character and noble purposes had won him a conspicuous place in the profession; and,

WHEREAS, The community he served has lost a faithful friend and able counselor; and,

WHEREAS, His family has sustained a profound sorrow; therefore be it

Resolved, That the Medical Society of Delaware County extend to the family, the faithful wife, loving mother and devoted brother, in the hour of profound sorrow through broken ties, blighted hopes and defeated aspirations, its sincere sympathy.

The Board of Censors reported favorably upon the application of Dr. George F. Ames, Eaton Ind., and he was duly elected to membership in the society. The following applications for membership were received: Dr. U. G. Powers, Albany; Dr. N. D. Berry, Muncie, and Dr. Earl S. Green, Muncie.

An excellent paper on "Heredity" was presented by Dr. A. A. Cecil, and ably discussed by Dr. W. W. Wadsworth and others.

Motion made and carried that Dr. Cowing's paper on "Six Hundred Cases of Labor in Private Practice" be referred to the Indiana State Medical Association for presentation at its next meeting. Motion made and carried that the June meeting of the society be postponed from June 2 to June 12.

Adjourned. H. S. BOWLES, *Sec.*

The regular monthly meeting of the Delaware County Medical Society was held Friday, June 12. Resolutions of respect were adopted on the death by drowning of Dr. Homer M. Shaw, of Gaston, a member of the Society.

The Board of Censors reported favorably upon the applications of three physicians for membership in the society, filed at the May meeting, and they were elected to membership as follows: Drs. Earle S. Green, Muncie; Noah D. Berry, Muncie, and U. G. Powers, Albany.

Dr. A. H. Good presented a paper on the subject, "Puerperal Peritonitis," in which he emphasized the value of serum therapy in this affection. The paper elicited an excellent and general discussion by the members. Among the points brought out were the extreme necessity of prophylaxis, the blameworthy tendency to regard and handle peritonitis, septicemia, etc., differently when they appear during the puerperium, and the danger of sepsis from the parturient woman examining herself during the progress of delivery.

Adjourned. D. M. GREEN, *Sec. pro tem.*

KOSCIUSKO COUNTY.

The Kosciusko County Medical Society held its regular monthly meeting at the Court House in Warsaw, June 9. Meeting called to order by President C. R. Long, of Pierceton. Minutes of the May meeting read and approved. The following physicians were elected to membership: Drs. W. O. Benson, Milford; Emanuel Stockberger, Milford, and Forrest J. Young, Leesburg. Dr. S. S. Allen, of Packerton, was unanimously granted a certificate as to his moral, ethical and professional character, to be used in securing right to practice in the State of Illinois.

The first paper of the evening was by Dr. E. E. Haworth of Claypool, on the subject, "Anatomy and Histology of Tumors," which was discussed by Drs. Schakelford and Hines of Warsaw. Dr. A. C. McDonald of Warsaw, read a paper on "Differential Diagnosis of Malignant and Benign Tumors; Varieties,

Location and Microscopic Appearance." This paper was discussed by President Long of Pierceton, and Dr. Haworth. Dr. C. E. Thomas read a paper entitled, "Cancer and Fibroids of the Uterus." Drs. Fermier, Long, Haworth, McDonald, Hines and Howard participated in the discussion. Dr. Fermier presented a pedunculated fibroid tumor of the uterus. The operation was performed eight years ago (a complete hysterectomy being done), and the patient is well to-day.

Adjourned.

C. NORMAN HOWARD, *Sec.*

PIKE COUNTY.

The Pike County Medical Society met in regular session June 9, with an exceptionally large attendance. Dr. J. T. Kime presented the first paper of the evening on the subject, "Prostatitis," giving many interesting facts regarding this disease, and showing the good results to be obtained from the use of faradic electricity. The paper was freely discussed. Dr. Walter M. Hunter was also to have read a paper on "Puerperal Fever," but was compelled to leave before reading on account of illness. Drs. Coleman and Basinger reported several interesting cases to the society. All the physicians of the county were invited to attend the meetings and join in discussions whether members or not.

Adjourned.

E. S. IMEL, *Sec.*

BOOK REVIEWS

GLIMPSES OF MEDICAL EUROPE. By Ralph L. Thompson. Professor of Pathology, St. Louis, University School of Medicine. Cloth; pages, 235; price, \$1.50. J. B. Lippincott Co., Philadelphia, 1908.

This book contains a very entertaining and instructive description of things medical as seen by an American physician during a visit in the medical centers of Europe. The book is not intended as a guide in any sense and yet it contains much information concerning the various hospitals, clinics and medical teachers of Europe which will prove of value to the man who is about to take his first trip abroad.

BIER'S HYPEREMIC TREATMENT IN SURGERY, MEDICINE AND ALL THE SPECIALTIES: A MANUAL OF ITS PRACTICAL APPLICATION. By Willy Meyer, M.D., Professor of Surgery at the New York Postgraduate Medical School and Hospital; and Professor Dr. Victor Schmieden, Assistant to Professor Bier at Berlin University, Germany. Octavo of 209 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$3.00, net.

This contribution is an attempt to bring before the profession in brief form what is known about Bier's hyperemic treatment up to the present time. Especially noteworthy and commendable is the freedom from extravagant claims and fine spun theories concerning this rather new yet promising therapeutic agent. Actual clinical results are presented, together with suggestions as to the possibilities in other conditions, without any claim for the remedy as a panacea. The physician is not asked to discard other well recognized and valuable therapeutic measures, but merely to consider hyperemia for what it is worth, in the hope that it will be given just credit for what it has already

accomplished and a patient and conscientious trial wherever it may seem to be indicated.

The whole method is of course founded upon Bier's conception of inflammation as an auxiliary to a cure rather than a detriment, and as Nature's own weapon in fighting infection. The various kinds of hyperemia are described in detail, together with their methods of induction, and then follows a résumé of the clinical conditions in which it either has been or may be advantageously employed. The work ends with a very modest conclusion and an appeal to the profession for a more extensive and thorough trial of what would appear to be a rational therapy where indicated.

DISEASES OF THE NOSE, THROAT, AND EAR, MEDICAL times a slightly clumsy diction have crept into what must otherwise be considered an excellent résumé on the subject dealt with and for which the profession owes its thanks to the authors.

DISEASES OF THE NOSE, THROAT, AND EAR, MEDICAL AND SURGICAL. By William Lincoln Ballenger, M.D., Professor of Otology, Rhinology and Laryngology, College of Physicians and Surgeons, Chicago. Illustrated with 471 engravings and 16 plates, 905 pages, cloth, \$6.00. Lea & Febiger, Philadelphia and New York, 1908.

This is the most comprehensive as well as the most practical and thoroughly up-to-date work on medical and surgical diseases of the ear, nose and throat that has ever been published. Such marked advances in the knowledge of these subjects have been made within a comparatively short time that no apology had to be offered for the presentation of such a thoroughly modern work to the medical profession. The author has very wisely solicited and secured the very latest opinions from recognized authorities in his particular specialty and incorporated the knowledge thus obtained with his own, based upon extensive experience and painstaking investigation, thus giving to the reader an exposition of the subject which carries with it the weight of the leading progressive oto-laryngologists and presenting at the same time the very latest and most advanced thought on the subjects considered. To enumerate all of the special features of the work would require reference to a large number of subjects, for nearly every chapter has something in it which marks it as being entirely modern as compared to other books on the subject which have found a place among authoritative works. Particular mention may be made of the consideration of diseases of the accessory sinuses and their relation to other diseases and conditions, the rôle which infection plays in the diseases of the ear, nose and throat, and the operative treatment for the surgical diseases or conditions. Bronchoscopy and esophagoscopy, resection operations for the relief of deviated septum, the intranasal operation for disease of the accessory sinuses, the grafting of the facial nerve for the cure of facial paralysis, and many other subjects which have lately received such marked consideration and alteration of opinion are all considered in a most admirable and satisfactory manner. The wealth of illustrations, a large portion of which are original, add materially to the value of the book and make of it an atlas as well as a text-book. The mechanical features of the work are also all that could be desired. In short the book fills a demand for a practical yet comprehensive and modern treatise on the subjects discussed, and the author has fulfilled his efforts in this direction in an eminently satisfactory manner.

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ORIGINAL ARTICLES

THE DIAGNOSIS AND TREATMENT OF FLUCTUATING TUMORS OF THE FEMALE PELVIS.*

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RICHMOND, IND.

The diagnosis of the various forms of fluctuating tumors of the pelvis requires great care, each individual case presenting its own peculiar symptoms and difficulties. Direct and conjoined examination must always be employed, and even by these methods errors may occur unless the general physical conditions and past as well as present history of the patient be interrogated and correctly interpreted. After exhausting all other means of inquiry, it will not infrequently happen that nothing except an exploratory incision into the field in question will positively establish the character of the disease and reveal the extent to which the organs are affected. For instance, an ovarian cyst and a parovarian cyst present no different signs, symptoms or history, and both may quite easily have all the symptom-complex of an early tubal gestation. Other instances of the same character will occur to every practitioner, but the limits of this article prevent a full elaboration of the matter.

Certain pelvic accumulations of a fluid character are common to both sexes, the more important being psoas and iliac abscesses, distended bladders (both urinary and gall bladders), renal tumors, floating kidneys, encysted ascites, intestinal tumors, hydatid, pancreatic and mesenteric cysts, retroperitoneal glands, and cysts of the

urachus. Psoas and iliac abscesses originate either from a breaking-down vertebral bone or from suppuration of the ilio-sacral joint, or of the inner surface of the ilium or acetabulum. The pus follows the iliac muscle-sheath, finally appearing below Poupart's ligament in the space between the outer edge of the rectus femoris. Sometimes pus burrows along the sartorius, appearing along the course of that muscle. The history and the fact that pressure on the tumor causes its displacement will usually establish the diagnosis of these collections. Attention to the necrosed bone and drainage from the lowest point, either anteriorly or posteriorly, together with care of the general health, constitute the indications for treatment.

Pus may accumulate in the pelvis from any form of abdominal suppuration, as quite frequently, for instance, after appendicitis. After rupture of a pyosalpinx, the pus may gravitate to Douglas' cul-de-sac, from whence, as a temporary means of relief, it may be evacuated by an incision back of the cervix. Sometimes this will accomplish a complete cure, but the diseased tube remaining many sequelae, such as fistulae or recurrent pelvic peritonitis, may eventually demand the tube's removal. Unless a urinary bladder is sacculated, the catheter will determine whether distention is present. Gall bladders extend from above downward into the pelvis, and have such a history of pain, with recurrences of jaundice, nausea and other symptoms that establishment of their diagnosis is usually easily made. Ascites is ordinarily easy to differentiate, because of its accompanying diseased conditions. Floating kidneys, renal tumors and cysts of the urachus and pancreas also can be traced from above downward into the pelvis, and each of these conditions will have its own history to aid in a diagnosis. Encysted ascites, mesenteric and

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

intestinal cysts and that very rare disease, hydatid cysts, may require an exploratory incision to make a positive diagnosis. Preparation must always be made to conclude such an incision by a complete operation for a cure of the conditions that may be found. The tumors of the pelvis that are distinctively diseases of the female are hydrannios, or uterine cysts, extrauterine gestations, ovarian and parovarian cysts and the various forms of salpingitis (hydro-, sacto- and pyosalpinx).

A fluctuating tumor inseparable from the pelvic brim below, with resonance above and beside it, and known not to be a distended bladder, is probably either an ovarian or a uterine tumor.

If the tumor is ovarian, it probably has a pedicle, and is limited in its range of motion upward. If it is continuous with the uterus, giving the impression that no pedicle exists, and has a history of rapid growth, with irregular or suppressed menses, morning sickness and perhaps ballottement, tubal pregnancy is probable. If such a case suddenly develops intense pain, with a very rapid pulse, cold, sweaty skin and the other symptoms of hemorrhage, a ruptured extrauterine gestation probably exists, and the utmost caution must be exercised in its management.

Salpingitis is usually bilateral, and is the sequel of some other disease, either specific, tubercular or of some less virulent micro-organism. Its symptoms in the early stages are merely those of metritis or pelvic cellulitis. Pain, usually dull, aching or of a burning sensation, is felt. This is increased by any local pressure such as examination by touch or speculum, and it is exaggerated by the effort to defecate. On local examination a very tender, irregularly swollen mass of a rounded character can be made out on one or both sides of the pelvis. Care must be exercised in such local examination for fear of breaking the tumor and releasing its contents into the peritoneal cavity.

It was the author's experience to have recently under his care the three kinds of pelvic tumor last mentioned, all at the same time. One was an unusually large parovarian multilocular cyst. The second case combined the results of a chronic salpingitis and an ectopic gestation, and the third was an uncomplicated tubal cyst. In the first or large tumor, the weight of which was thirty pounds, there was a history of irregular, scanty menstruation, which led to the belief that pregnancy existed. After a few months, however, the normal function was re-established, and the tumor grew very rapidly and assumed the

characteristics of an ovarian cyst. The patient complained of soreness and pain of a neuralgic nature above the right ovary and imagined she felt fetal movements, but later it was definitely established that these were due to gas in the intestines. The contour of the abdomen was smooth and symmetrical and always found about the same. Distinct fluctuation was easily detected upon palpation and dulness upon percussion. Complaint was made of dyspnea, especially in the recumbent position, and a general discomfort due to abdominal distention was experienced.

After a delay of eleven months the patient was fully convinced by repeated consultations that the condition present was an ovarian cyst and that abdominal section must be done.

On the 10th of March I removed the tumor at the Reid Memorial Hospital. A long incision was required, because of the size of the tumor, commencing three inches above the umbilicus and extending downward to the pubes. The main cyst contained twenty pounds of fluid, and after delivering the sac in the usual manner considerable difficulty was encountered in removing the supplementary cysts, which were quite firm and numerous and which, in addition to the sac itself, weighed ten pounds. While not adherent, the mass was so bulky it was difficult to remove through the long incision. Her recovery was uneventful—she walked about the room on the twentieth day and returned home a few days later.

The second case has the following history:

Nine years ago, after a severe attack of pelvic peritonitis, an ovoid, boggy, fluctuating mass was found in the right pelvis about one-half inch away from the uterus. Operation was urged at that time and repeatedly in the years that followed. The danger of a rupture of this sac being pointed out to the patient by other physicians and myself, however, she steadfastly declined an operation. While there operation was urged, but, because of the rapid improvement while resting in bed, and with the use of ichthyol tampons and hot douches, she concluded to wait until fall for the laparotomy, which she knew at last was inevitable. On March 23 I called on her at her home, found her in excellent spirits and entirely free from pain, but still having an ovoid, fluctuating mass in the pelvis, connected with the uterus. A slight menstruation had occurred and she was very urgently entreated to have an immediate operation for fear of a rupture of the sac; however, she again refused. At 9:30 a. m. on March 25, less than forty-eight hours after this conversation, I was hastily called to see this

patient and found her apparently about to die. She was cold, her features pinched and drawn, and intense pain present in the right pelvic region, and no radial pulse could be detected. I hastily summoned an ambulance, but waited an hour before removing her to Reid Memorial Hospital, for fear she might perish on the road. Recovering somewhat, I removed her, and the laparotomy revealed a chronic, inflamed tube, within which pregnancy had occurred and progressed to about the sixth week, and then the tube ruptured. The abdominal cavity contained an immense quantity of blood. The hemorrhage was immediately controlled by clamps: hot sponges were packed in the pelvis. She made an uneventful recovery. The intercutaneous stitch was removed on the tenth day, and two days later she returned home, without any elevation of temperature or other disagreeable symptoms following the operation. No more frightfully marked contrast could possibly exist than that which was present immediately before rupture of this tube and the condition of the patient directly afterward.

In describing the symptoms of a tubal abortion, such as this one was, J. Whitridge Williams, in his "Obstetrics," says:

"In many cases the first manifestation of the abnormal pregnancy is the sudden occurrence of intense, lancinating pain in one or other ovarian region, which is soon followed by faintness, the patient rapidly passing into a state of collapse. This indicates the occurrence of abortion or rupture. In the former case the patient usually rallies promptly, whereas, if rupture has occurred, the collapse deepens, the face becomes extremely pallid, and the patient complains of intense pains in the lower abdomen. The temperature is persistently subnormal, and an examination of the blood shows a marked diminution in the number of red corpuscles and in the amount of hemoglobin. Death may occur within a few hours, unless the hemorrhage is checked by operative means."

The third case came to my office on April 6. She had a history of irregular menses twice within two weeks, the last time the hemorrhage being very profuse and exhausting in character. She also had severe backache, especially on the left side, and headache always more severe at night and when lying down or after being on her feet very much.

On examination a fluctuating tumor, the size of a very large lemon, was found about one inch away from the uterus. This was free from pain on pressure. The danger of the case was explained and, the possibility of a pregnancy being

mentioned, an immediate operation was urged, which was agreed to and performed on April 9. On section a tubal cyst was found and removed, and the patient made a very satisfactory recovery, the intercutaneous stitch being removed on April 18, and she returned home ten days later.

In a recent letter from Dr. A. J. Ochsner on the treatment of fluctuating tumors of the female pelvis, he gives as his opinion that all such tumors must be removed surgically, and that such is his routine practice, after having observed them long enough to insure a good result.

DISCUSSION.

Dr. H. G. Nierman, Fort Wayne:—I think possibly the question as to whether thirty-pound tumors should be immediately removed is a debatable one. Probably dividing the operation into two sittings will reduce the amount of shock and give the patient a little advantage in that respect. I offer this as a suggestion. There are cases with no complications. There are others with hemorrhage and shock that die as the result of the operation.

Dr. T. B. Noble, Indianapolis:—I wish to take the opposite view, that in large multilocular ovarian cystoma tapping should be resorted to before removal, in the way mentioned here. With local anesthesia, puncture is a matter directly under our observation. Two days ago I was compelled to do, under local anesthesia, a very difficult and trying operation in a case of adenocystoma which had been tapped several times, to have the fluid recur, the leakage through the tapping producing a very widespread reaction in the peritoneum, in which the ovarian tumor was adherent to everything that it came in contact with. Under a local anesthetic and nothing else this tumor was removed. So that I am certain that with the experience I have had with local anesthesia we do not have to contend with such a procedure as tapping or temporizing treatment. We can do radical, curative work by local anesthesia.

Dr. Nierman:—This was a thirty-pound tumor I was speaking of.

Dr. Noble:—Mine was a thirty-pound tumor also.

Dr. M. I. Rosenthal, Fort Wayne:—This is 1908. The way to remove a cyst is to take it out, and if you want to tap it at all tap it after it is out.

Dr. Goethe Link, Indianapolis:—I favor tapping in ovarian cyst after the belly wall is opened and not until then. Yet if there is a case in which the patient is so exhausted that she can

not stand the complete operation we have another procedure known as marsupialization, in which the edges of the cyst may be tacked to the belly wall and left for later developments. This method of handling ovarian cysts does not hold good altogether in dealing with another fluctuating tumor of the pelvis mentioned in the paper, and that is large pelvic abscesses or even large pus tubes. I am very much in favor of dealing with large pus tubes where the patient is very ill by first opening them through the vagina and draining them and later on taking them out through the anterior abdominal wall. We must not, however, tell the patient that we expect to cure them by this drainage operation, which is only to prepare them for later treatment. But in doing this we occasionally have a patient get so well that they will not submit to further procedure. This is especially true, as I have found, in cases in which the infection is due to something aside from gonorrheal infection. In gonorrheal infection there will be found different compartments in the pus tubes and we can easily demonstrate that they can not be drained through the vagina.

In closing the discussion, Dr. Grant said: "Regarding what has been said as to evacuating a pelvic abscess or an ovarian cyst by means of a trochar, or by aspiration, I heartily agree with Dr. Rosenthal.

"Beside thanking the Section for their attention, I believe I have nothing more to say."

TECHNIC OF HARE-LIP AND CLEFT PALATE OPERATIONS.*

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In the works of most writers upon this subject we find the statement that it is never wise to operate for cleft palate on a child under 3 years of age, and that the time of election is from this age up to the age of 6 years.

It is said that infants do not bear operations well. There is very little support for this statement.

Brophy, of Chicago, who has had an enormous experience in this field, believes that there is less nervous shock after an operation on a child of a few weeks of age than when the babe is older,

that the bones are softer, that after operation the child will be better nourished, that the muscles of the palate are given an opportunity to develop instead of atrophy, and that the patient does not get into the habit of articulating through the cavern of the nose.

Lane, of London, whose work in this field is distinguished both for its fiber and volume, declares the best time for cleft palate operations to be the day after birth or as soon after that day as possible. I have an assured conviction that the newborn child bears surgery much better than is generally imagined. The capacity of the tissues for repair at this time is at the best. Resisting power has not been reduced by the breathing in of cold air through a roofless mouth. Digestion has not been impaired by unsatisfactory feeding. Moreover, at this time the impression of pain is probably not so acute (Lane). The very circumstance that the infant has just passed through the birth canal with all the brutal mechanical insults which may be incident to this excursion indicates the presence of a tolerance of traumatism which becomes less in evidence as the infant grows older.

In Lane's operations during the first week the infant rarely cries or shows evidence of being in pain. It is almost never sick after the anesthetic and takes its food within an hour or two after the operation with evident enjoyment.

Brophy says the baby weighs more just after birth and has greater vital resistance than for months later.

In an ordinary cleft palate operation at this time the loss of blood should be trivial, but, however this may be, the danger from loss of blood is no greater than at a later period. Our experience has never suggested that young infants do not bear the loss of blood well. If there is any reliable evidence to the effect that a very young infant does not bear the loss of a given proportion of its blood as bravely as an older individual we have no knowledge of it.

We must not forget Lane's injunction that the success which attends these operations, so far as the perfection of speech is concerned, varies directly with the degree of possibility of development of the nasopharynx at the time of operation and with the freedom of the passage of air through it.

"When, as in cleft palate, the septum between the nasopharynx and the mouth is incomplete, the mechanical factor upon which the nasal cavities

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

depend for their development is in abeyance and, therefore, they do not increase proportionately in size. In consequence, the sides of the alveolar arch become approximated, as do the edges of the cleft, and the portions of the roof on either side become more vertical and extensive."

Many surgeons use as an argument in favor of delaying the operation the statement that the changes in the roof of the mouth which take place in time render surgical interference more simple at a later date. In other words, they say "the less developed the nose, the more easy the operation for the closure of a deficiency in its floor."

Lane, however, contends that "since the caliber of the nasal cavities bears an inverse proportion to the height of the palate and as the lower part of the nasal fossa is that through which air is chiefly transmitted, this is especially encroached upon by any abnormal increase in the height of the palate. Being aware of the mechanics of the nasopharynx, it will be easy to recognize the immense importance of separating the mouth from the nose as early in life as possible so that the pressure exerted by the air as it passes through the former can be brought to bear upon the walls of the space and the nasal cavities and the adjacent bones influenced by normal developmental factors.

"The conclusion that closure of the cleft in no wise remedies defective articulation was formulated after observation of cases operated too late. A closure of the cleft does remedy defective speech if the operation is performed early in the period of growth. The peculiar intonation of the cleft palate child, the mis-called nasal tone, is due to the circumstance that the outgoing air does not pass through the nose at all, and when the cleft is closed at the usual late time, there is in the extremely underdeveloped nose very little space through which air can be transmitted and, of course, there is very little good in trying to develop this space after such a late operation."

Brophy says: "The later the operation the weaker the lungs, the narrower the nasal passages, the more abundant the adenoids and the more difficult the operation for the closure of the palate cleft from the technical standpoint."

Brophy advises against closing of the palate cleft and that of the hare-lip at the same time; that is, he waits until the palate has completely closed and the patient has recovered before devoting any attention to the lip. It is needless to say that when both operations are done at the same seance the palate should be treated first, for the reason that the existence of the hare-lip gives more room in which to work, but in the contro-

versy as to whether the lip should be operated with the palate I have preferred to follow the teachings of Lane, who operates the lip and the palate at the same time. He does this for three reasons.

The first and most important is that the soft parts which are removed necessarily from the margins of the lip may be of the greatest service in completing the closure of the anterior part of the cleft of the palate. "Indeed," he says, "to one unfamiliar with the employment of these portions of the lip in this manner the large area of cleft which the pieces of lip can be made to close is most striking. They have a remarkable vitality and bear an extraordinary amount of handling and suturing with safety."

The second reason is that postponing the hare-lip operation for a time reduces the chances of union.

The third reason is that the sooner the pressure of the complete lip is brought to bear upon the segments of the upper jaw as well as upon a displaced premaxilla, should it exist, the more rapid is the approximation of the bones forming the front of the cleft and the restoration of the premaxilla to its normal relationship. The muco-periosteum covering the premaxilla is also useful in helping to close the cleft.

The pressure which is exerted upon a protruding premaxilla by the lip after its continuity has been effected is, in the opinion of some surgeons, sufficient to bring about its backward displacement into the interval between the two maxillæ. If the hare-lip is closed very early, this takes place with rapidity, but if the hare-lip and cleft palate are ignored for months or years it will be necessary to free the premaxilla with a chisel or a stout knife before it can be pushed back into the interval between the two maxillæ in front. It is needless to say that the prolabium and the premaxilla should never be cut away, but always used to close in the gap in front where the cleft of the lip is bilateral or that of the palate is complete. Surgeons to whom these cases come frequently have all been informed at some time that a rolled up piece of tissue hanging from the septum of the nose had been promptly and confidently cut away, the family physician either being ignorant of the value of the prolabium in closing the defect of the lip or perhaps being unable to understand at all the meaning of the presence of this centrally developing portion of the lip.

After early operations upon the lip and palate the nose is gradually pushed forward by the growth of the septum.

In Lane's technic for narrow cleft, if the soft parts overlying the edges of the cleft are thick and vascular, a flap is cut from the mucous membrane, submucous tissue and periosteum of one side, having its attachment or base along the free margin of the cleft. The palatine vascular supply is divided while the flap is being reflected inwards and it depends for its blood supply on vessels entering its attached margin.

The mucous membrane, submucous tissue and periosteum are raised from the opposing margin of the cleft by an elevator, an incision being made along the length of the edge of the cleft.

The reflected flap with its scanty supply of blood derived from small vessels in its attached margin is then placed beneath the elevated flap whose blood supply is ample and it is fixed in position by a double row of sutures. In this manner two extensive raw surfaces, well supplied with blood and uninfluenced by any tension whatever, are retained in accurate apposition.

If a wide gap is found to exist in soft palate, Lane dissects up a flap, consisting partly of mucoperiosteum from over the hard palate and partly of oral layers of the soft palate. He turns this flap over, doorlike, it having been dissected free down to the edge of the cleft, and sutures it to the freshened edge upon the opposite side of the defect.

In many cases of wide defect, after dissecting up a flap in this manner on one side upon the oral surface of the soft palate, a similar flap is dissected free from the upper or nasopharyngeal surface of the soft palate so that it is then possible to fill in the defect by applying these flaps to each other, raw surface to raw surface, so that the tissue bridging the defect is covered both above and below by mucous membrane.

The Brophy uranoplasty is often the one of choice after the age of six months. After seizing the tip of one of the divided halves of the uvula with fine forceps, a sharp tenotome is introduced at the uvular end and a narrow strip is split off all the way around the edge of the cleft. The strip should come off in one piece and cut with the knife introduced obliquely so that more mucosa is cut from the oral than from the nasal side. When the suturing is begun, it will be seen that this beveled edge is an important factor in precise coaptation.

By incising parallel to the edge of the cleft the soft palate is split and all the mucoperiosteum is raised from the hard palate, being left attached in front and behind. Through the incision thus made in the oral mucous membrane, the nasal mucous membrane and the tissues at-

tached to the posterior edge of the hard palate on each side are divided with scissors.

In practice it will be possible almost invariably now to bring the edges of the cleft together without division of the hamular process, as in Billroth's procedure. For in high palatal arches the two mucoperiosteal flaps will fall together after having been loosened, like the two halves of a cantilever draw bridge.

Incisions dividing the muscles of the soft palate are quite unnecessary and mischievous in many cases.

The use of Brophy's wire and lead plates in his simple uranoplasty is likewise unnecessary. The wire and plates frequently slough and cut out, even in Brophy's hands.

C. H. Mayo, after having prepared the parts for the insertion of sutures and having made two lateral incisions close to the alveoli, introduces a narrow tape which surrounds the right and left mucoperiosteal flaps. Traction on the ends of the tape brings the flaps towards the operator, steadies them and facilitates the introduction of the ordinary sutures. When the sutures are in place and tied, Mayo crosses the free ends of the tape and fixes them by tying a ligature around them at this point, cuts off the superfluous portions of the tape and, lastly, slides the whole tape until that part fastened by the ligature lies in the nasal instead of in the oral cavity. The tape fastened as above, it was claimed, acts as an efficient relaxation suture or support; it also drains secretions from the nasal cavity into the mouth. Into the lateral incisions Mayo packs iodoform gauze to "splint" the flaps.

In our experience, the use of Mayo's tape has proven very disappointing. It is true that with the tapes passed through the lateral incisions around the flaps, the edges of the flaps may be held easily in apposition and the introduction of sutures thus facilitated. However, the practice of tying the tape and leaving it in as a sort of support or relaxation suture is somewhat dangerous. If it is tied tightly enough to give any additional support whatever, it must be tied tightly enough to strangulate the slender flaps in some degree. We have used the tape several times and believe that its presence has always interfered somewhat with union. The results have been better since it was discarded. Sherman, of San Francisco, prefers waxed tape, which he says does not become infected.

In suturing together the edges of the cleft in ordinary uranoplasty, there is no better suture material than fine chromic or iodine catgut. After using silk, linen, celloidin hemp and Lane's Chi-

nese twist, we find simple chromic catgut the best of all. The sutures should, as advised by Sherman, be matted to the end that the greatest extent of raw surfaces be coapted.

We think that many of the special instruments are unnecessary.

Many gags have been presented, but it is difficult to appreciate their superiority over the Whitehead. Small French needles serve admirably, and for this work there is no better needle holder than a good Halsted artery clamp, the cerations upon whose jaws have been filed down a bit.

The anesthetic employed should be ether, administered in the form of vapor through a curved tube passed into one naris and attached to a double Junker bottle or to the double bottle of Brophy devised for this purpose.

We confess we have had no experience with Brophy's compression operation, believing, perhaps with insufficient reason, that, though ideal in the first week, it should be employed in such selected instances only for the reason that it involves forcibly pressing together the two sides of the upper maxillary arch with consequent narrowing of the nasopharynx and vault of the mouth. Brophy occasionally divides the malar process to the end that the edges of the cleft may be forced together. If the operation is done in a very young infant, subsequent growth and development may overcome the narrowing of the channels consequent upon this compression, but perhaps not.

In the Brophy operation, with a stout needle threaded with silk or celloidin hemp, strong silver wire is passed through the superior maxilla just back of the malar process and high enough to be above the palate. In other words, the wire passes from the outer surface of one alveolar process through both sides of the upper jaw to the outer surface of the other. One or two additional wires are passed through both superior maxillæ and in front of the first. The ends upon each side are twisted together over lead plates after the edges of the cleft have been forced together by powerful compression of the two superior maxillary bones between the operator's thumbs.

In every operation for complete hare-lip it will be observed that the ala of the nose is pulled to one side and the nostril much widened. To the end that there may be no tension upon the sutures and that the nostril may not be too broad, it is important that the nose be separated from its deep connections upon the side concerned. This is readily done by passing a pair of scissors between the lip and the superior maxilla

and completely severing the soft tissues from the bone over an area approximately as large as a 25-cent piece.

"The upper lip is everted and pulled upwards and outwards by the finger and thumb of the left hand. The mucous membrane is incised at its reflection from gum to lip and divided from the premolar region on one side to the premolar region on the other side, if necessary. Through this incision, with knife and scissors, one separates the soft parts from the bones (keeping the instrument close to the bone). Particular attention must be paid to the separation of the ala of the nose from the bone."

To what extent must the soft parts be separated from the bone? Binnie answers: "Until the edges of the cleft of the lip, when placed together, show a tendency to lie in apposition so that the sutures when introduced may be tied without giving rise to tension."

After trying most of the suture materials for hare-lip, we are convinced of the superiority of horse hair sutures alone, unless there be considerable inevitable tension, in which case silver wire may be used.

When silver wire is used for suturing, it is usually attached to a straight or curved needle by simply bending back one end of the wire after it is passed through the eye. It may be introduced somewhat more easily by using a needle armed with a loop of silk thread with which the wire suture is drawn into position. The free ends of the sutures are then twisted, quilled or shotted or secured by glass beads, according to the degree of tension and the character and location of the wound.

If thick wire be threaded indirectly through the eye and doubled backward upon itself, there will be formed at the necessarily broad butt-end of the needle an awkward lump. To jerkily draw this lump through delicate tissues, like those of the soft palate or the lip of a young infant, must, in the nature of things, cause tearing and contusion which detract from the usefulness of the suture. The jerking of the lump of wire through the tissues becomes especially disagreeable after one or more sutures have been introduced and secured, the likelihood of loosening or displacing such already adjusted sutures being considerable. The entrance and erratic excursions of the loop of wire produce an unnecessarily large skin opening and stitch canal and predispose to infection and consequent "cutting out" of the suture.

To obviate these difficulties, we have used in hare-lip operations a No. 24 standard gauge sil-

ver wire suture, eighteen inches in length, to one end of which is attached with silver solder, after annealing of both metals, a full or half-curved steel needle. This gives a perfectly smooth joint which may be drawn through delicate tissues without adding unnecessary laceration to that produced by the needle point and which does not catch abruptly at the skin. In most cases, eighteen inches of wire will suffice for a half-dozen sutures, a piece of the desired length being cut from the distal end of the wire after each introduction of the needle. The needle, after the sutures have been thus cut away, may be re-armed with wire or discarded.

Some years ago there was introduced to the profession a silver wire needle with a hollow threaded butt, into which a wire suture might be screwed and fastened. This needle has not come into general use, for the reason that its butt, though beveled in both directions, is much larger in diameter than the wire it admits and its attachment to the wire is insecure.

Silver wire is generally recognized as a useful suture material. It is easily sterilizable. Moreover, it has been repeatedly demonstrated that metallic silver has an inhibitory effect upon the growth of bacteria. A properly prepared silver wire suture is, therefore, not simply aseptic, but more or less "antiseptic."

Silver wire is unirritating and strong. If it is sterilized by heat, as by boiling in soda solution—with instruments—the metal becomes annealed and is thus rendered soft and pliable and less liable to break when twisted.

A shot wire suture is easily removable, since the shot is not apt to be obscured by the swollen tissues and is easily seized with forceps and cut from the wire. After the suture has been introduced and cut off to the desired length, the ends are passed each through a perforated shot. One shot is clamped and the other is "shirred" or drawn along the wire to the skin with moderate firmness, to bring the wound edges together, and then compressed. The ends of the wire suture should be cut "flush" with the surface of the shot. The malleability of silver enables the surgeon to give to the wire suture any desired bend. This is impossible with a silk wormgut suture which, wherever possible, assumes the form of a ring. This disposition of silkworm gut to shape itself, owing to its "springiness," into a ring, is not infrequently responsible for the first laceration of the tissues, which results in complete "cutting out" of the suture.

It will, however, be rarely necessary to use a suture of the character of wire. In almost every

case of incomplete hare-lip, strong horse hair is in every way satisfactory. The elasticity of horse hair and its possibility of almost complete sterilization, together with its relatively small diameter, militate against scar formation. It is the only suture material in use which grows naturally in the skin. It is constructed of epithelium, is non-irritating and, if properly prepared, is the best possible suture material for use in the skin.

The writer's more or less original method of arranging the hair sutures is as follows:

After freshening the edges of the cleft according to the best method suitable in the particular case, the first horse hair suture is introduced at the top of the cleft, penetrating the skin about one-eighth of an inch from the edge of the cleft on one side and emerging at the mucous border. It is then passed through the flap on the opposite side in the same way, except in the opposite direction. This top suture is tied and the ends left long. Then at the vermilion mucous border a similar horse hair suture is passed, precisely coapting the mucosa. It is tied and the ends left long. Traction upon the ends of these two sutures coapts the freshened edges of the cleft so that intervening sutures may be put in with remarkable facility. Especially is this true of the horse hair sutures upon the mucous surface, the upper lip being everted and pulled upwards by traction upon the lower suture, the entire length of the freshened edges of the mucosa being exposed.

In order to avoid the occurrence of a notch on the lip after the wound has shrunk, the freshening is done after one of the classic methods which are legion. But in order to make assurance doubly sure in this instance, a little roll of gauze about the size of the distal phalanx of one's little finger is fixed with its long axis transversely across the plane of suture and the long ends of the uppermost and lowest horse hair suture are tied over the little gauze roll so that the line of suture is wrapped, so to speak, around the gauze for about two-thirds of its circumference. This simple plan will effectively prevent notching after healing is complete and, moreover, it keeps the dressing in place, a matter of no slight importance. A good many surgeons use relaxation sutures. For example, Lane almost invariably introduces two relaxation sutures as follows:

He starts the needle upon the mucous side about a third of an inch from the edge of the cleft, passes straight through the lip and out upon the skin side. He then introduces the needle at its minute aperture of exit and passes

across the plane of suture to the opposite side, keeping the needle just under the skin and emerging again about one-third of an inch from the line of suturing. He then passes the needle back through this second opening in the skin, penetrating all of the tissues of the lip, including the mucosa. The suture is tied upon the mucous surface, an objection being that the knot is left upon the mucous surface where the infant will instinctively poke at it with the tongue. Such sutures should be omitted, if possible.

Binnie's suggestions in this connection are very sensible. "Should tension on the suture be feared, a strip of adhesive plaster cut dumb-bell shape may be placed from cheek to cheek with the narrow part across the upper lip in such a way as to relieve tension. If, however, the soft parts of the lip and cheeks have been sufficiently separated from the bones at the beginning of the operation, then such a measure is unnecessary and undesirable, as it simply irritates the already irritable patient. It is not necessary to apply any dressing to the wound, as Nature soon seals it with dried blood-clot. Until the sutures are removed there should be as little interference with the wound as possible. If it is going to heal, it will heal under the scab, and the best intentioned endeavors to clean the wound will merely interfere with Nature's work and do no good, as cleanliness can never be attained in such cases. Care must be taken so to fix the little patient's arms that scratching of the wound is rendered impossible."

All of these operations should be done with the patient in Rose's position in order that breathing may not be obstructed by blood gravitating into the air passages. In the case of a small infant, this simply means the placing of the baby in the dorsal recumbent posture and allowing the head to hang down over the edge of the rubber pillow.

DISCUSSION.

Dr. J. H. Oliver, Indianapolis:—At the present time the controversy in regard to these operations seems to be between an absolute bony apposition of the divided parts, as advocated by Brophy, and the plastic methods of Lane. Until the last year I have been rather averse to Brophy's method, because it seemed to me the operation was extremely radical for so young a subject. I had been taught that the two extremes of life bore operations badly. I now believe the two extremes bear surgical procedures remarkably well. Within the last two years, after visiting Brophy's clinic and watching him operate, I have

been won over to the belief that absolute bony apposition of these parts in early infancy is the proper thing. Infants stand this operation very well. I have reference now solely to the hard palate. I believe that Brophy substantiates his claim that the cleft in the palate makes the superior maxillary bone just that much wider than the inferior, and to get total occlusion we must bring these bones together in order that the teeth may properly touch. Now if this be true, the plastic operations so definitely and brilliantly laid down by Lane will not be necessary on the hard palate. Within the last two or three days I read an extremely interesting paper by Sherman, of San Francisco, a master in the art, who frankly admits he has never had the nerve to perform the operation and does not believe it is a justifiable procedure. Why? Because the bones after being held together three or four weeks by silver wire sutures would certainly spring apart. Within the past six months in one of my cases the bones did spring apart. But we should leave the sutures longer. I not infrequently tighten my silver sutures from time to time until I get union, fibrous though it may be. I am beginning to believe with Lane that the operation should be done within the first forty-eight hours. The parts are soft, infants stand hemorrhage very well, and there is very little of it.

As to the delayed operation, the operation on the soft palate, after eighty-five months, when Brophy's operation is no longer available, we are still a little at variance, although we are pretty well agreed upon the hard palate operation. I am at present using lead plates without the lateral incisions. I am going to do a few more before I come to any conclusion concerning it. There is certainly danger of sloughing. Brophy uses horse hair in the palate operations just as in the lip. I do not think Dr. Eastman's external applications in hare-lip are justifiable. Dr. Allen's appliance is very ingenious, just as all his appliances are, but I must say, after trying it and the plaster and various forms of retention suture, I do not use any retention suture at all. I use horsehair and nothing else. I do not think retention sutures are necessary.

Dr. H. R. Allen, Indianapolis:—In cleft palate work there are two stages—the early infant stage and the adult or neglected stage. The reason we have so many methods of treatment of this defect is because we have a big variety of clefts in the palate and lip to meet. Dr. Oliver quotes Brophy, that the upper jaw in these cases is wider by the width of the cleft in the palate than the lower jaw. This is and is not true. I

believe Dr. Oliver has seen cases in which the upper teeth corresponded with the lower, and then again the spread ones where the lower jaw will shut up inside the upper. In a body a day old strong fingers will pinch the cleft together, as is shown in the head of the fetus passed around, and up to six months we will have an easy job to press the cleft together, and after you have pulled it together the ideal cure is to get bony union. It is, as the Doctor has said, a spring under tension, and when we take the support away they may separate. But let them separate. You have union of the soft parts and all you want is to separate the nose from the mouth.

Now as to the later operation, after six months, it is certain that if you send a case to Brophy he will do the Brophy operation, but his operation is somewhat limited, and he admits that it is sometimes unsuccessful. The Brophy lead plates do not set horizontally and all the support you get is from the wires.

(Dr. Allen exhibited some cuts of the Davies-Colley operation and described the operation, and then continued:)

As to the hare-lip operation, they do not all require the same operation. It is a matter of sculpture in human flesh. It is a matter of artistic work. It is said hare-lip pins must be taken out within a few days. I have left them in two weeks. The adhesive plaster strip for taking off tension is of no use. You might as well tattoo the patient or paint him green. This cleat of mine they can not get away from.

Dr. David Ross, Indianapolis:—There is not so much difference in the treatment of hare-lip as in cleft palate, and certainly not as many absolute failures, because we deal with tissues in the lip where the resistance is better and they have a tendency to unite without trouble. But when we come to operations on the palate we deal with tissues that do not stand pressure. The tendency at present is to discard the lateral incisions to relieve tension in this line of work, and I believe in the main it is right, but we must bear in mind that we have not yet attained an ideal method of relieving tension where it is necessary. My objection to the Brophy plates is that they make pressure over a great deal larger area than is necessary, and that pressure does harm. In the second place is the objection Dr. Allen has raised, that we get the pressure only at an angle, and we have seen where they cut through and do harm and leave the condition worse than at first. What we want to do is

to relieve the tension well back where we have the separation, and the Brophy plate does not do it to our satisfaction. Certainly those of us who have not had such a large experience have not been entirely successful.

Dr. J. F. Barnhill, Indianapolis:—There are two things that are intended to be done in cleft palate and hare-lip. First is the esthetic result, and I think especially in the performance of the cleft palate operation the surgeon is too careful to get that esthetic result and hinders or damages the voice that may result, for the surgeon, of course, wants to show that the closure is perfect. All of these operations, to a certain extent at least, interfere with muscular action of the soft palate, and to the extent of this interference will there also be interference with the voice. Consequently nearly all plastic operations will not give a perfect voice. The less the interference with the levator palati and tensor palati muscles the better will be the result. Hence the Brophy operation is the ideal one and I can not help but believe it is correct in principle. Certainly all the cases I have seen have had this widening of the superior maxilla, this lack of union and not lack of development, as he maintains, and if you put these parts together without interference with the muscular development of the parts you will get this almost perfect voice of which Brophy tells us. Brophy does two operations, the one Dr. Eastman illustrates, and the other, the infantile. The Lane procedures, I believe, are the best that can be used in adults and children past the Brophy operation age. But if one expects from these operations that the voice is going to be what it should be he is going to be disappointed. The esthetic result will be good, but not the voice.

Dr. W. H. Gilbert, Evansville:—We all must concede Brophy has taught us a great deal about cleft palate. In fact, he has been the pioneer in successful hard and soft palate surgery. One thing he has taught us is the absolute necessity of infantile operation. It is impossible in any but the very young cases to achieve ideal results, and general practitioners should be so taught. My experience with the Brophy operation has been most excellent, with the exception of one case where there was some leak. Too many times sentiment stands in the way of good results in these operations, and the family is told by the physician to wait till the child is a year old. This is wrong. I am convinced that the first forty-eight hours is the best time, when, as Dr. Allen has stated, the cleft can be closed with

the fingers. Brophy tells us it is not caused by lack of development, but by the lower jaw pressing against the upper jaw in embryonic life, thus pressing it apart.

Dr. B. D. Myers, Bloomington, called attention to the low degree of sensitiveness of the child at birth, which is also true in the lower animals. A baby rabbit can be operated on up to twelve hours after birth and not need an anesthetic at all, even such an operation as an enucleation of the eye, and it will make no outcry; but eighteen hours after birth he sets up an awful howl. The reason is that at the time of birth the sensory nerves are in an imperfect state of medullation and are, therefore, not good conductors. The same holds true in the human, although it is not known at what time the medullation of the sensory nerves becomes more complete. Osmic acid is found to blacken medullated nerves, but they do not blacken with this agent up to fourteen hours after birth. Another experiment in this line is that the heart of a rabbit, if taken out and placed on a platter within twelve hours after birth, will continue to beat for a half hour, but if taken after twenty-four hours old it will cease immediately, showing the different stages of vitality and sensitiveness to external influences, and this may be taken advantage of in the operations referred to.

Dr. J. R. Eastman, Indianapolis (closing):—The compression treatment of cleft palate is not original with Brophy. I agree with the other gentlemen that the use of the lead plates is founded on a very faulty principle, because undoubtedly we have wire traction and nothing else. I think Dr. Allen is wrong in his statement that the use of this plaster strip does not interfere with the contractions of the risorii and orbicularis oris. He will find in practice that if the plaster be drawn backward toward the ear and twisted across the nose you can so draw the tissues of the cheek together that the child can do little crying or laughing. Dr. Allen's device, which in his hands gives good service, also has the fault that it makes pressure on the two sides, which might interfere with the blood supply to the wound.

THE EARLY DIAGNOSIS OF INGUINAL HERNIA.

B. VAN SWERINGEN, M.D.

FORT WAYNE, IND.

It would seem that nothing could be added to what has already been written on the subject of hernia which would give any further aid to its

thorough understanding by student or practitioner, and yet one meets with cases in which it seems difficult, if not impossible, to say whether or not a hernia exists. If one now turns to his "mass of material" on hernia for help on the question of diagnosis he will be rewarded by several very commonplace observations and find that the subject of diagnosis is dismissed as though it were the least important or the most obvious of the whole subject.

That it is not always a simple matter to diagnose hernia was illustrated by the following case: Mrs. D., a young married woman, was seen by me on account of a persistent vomiting. She had had a "stomach trouble" for several years which manifested itself by sudden attacks of vomiting associated with an illy-defined pain in the lower abdomen on the right side. These attacks came on at irregular intervals and would last for varying lengths of time, but would pass away finally after resuming the recumbent posture. When I was asked to see her, she had been much worse as far as the nausea and vomiting were concerned and was then under the care of a stomach specialist who was using lavage, diet, etc., to no effect. Upon examination pregnancy was suspected to be responsible for the aggravated condition, and no diagnosis made of the underlying trouble, although it was thought that the stomach symptoms were reflex. Time proved the suspicion of pregnancy to be well founded, and the nausea and vomiting subsided largely after a few weeks' confinement to bed on a liquid diet.

She noticed a swelling in the right groin when three months advanced in pregnancy, which appeared during the act of vomiting and which I found to be a bubonocoele, although it was not down at the time the examination was made. She was very negligent about her truss and continued to have her "stomach spells" even after her delivery. Finally the rupture made its appearance, and I was successful in gaining her consent to an operation. The hernial sac was found intimately connected with the round ligament. It was obliterated, a new inguinal canal was formed and a perfect recovery and result obtained.

The symptoms that led to the operation were those which were not recognized by the patient to be in any way connected with the rupture, namely, the nausea and vomiting and the occasional pain in the side. Of course, the fact that a swelling was known to have been present on several occasions was a great help in the diagnosis in this case, although twice the attack looked very much like a beginning appendicitis on ac-

count of rigidity and tenderness being added to the other symptoms, and the fact that at these times no tumor was discovered. The demonstration of the relation between these symptoms and rupture is proven, it seems to me, by the length of time which has elapsed since the operation (four months) without their recurrence. Formerly she would have had a great number of attacks in that time.

The symptoms usually given in text-books as indicating incipient hernia are pain, reflex disturbances and impulse on coughing.

Pain as a symptom of hernia is present in varying degrees. It may be totally absent. It may be very slight and referred to merely as a sense of weakness or discomfort which appears gradually and grows worse as time goes by, being brought on by any act which increases intra-abdominal tension, as coughing, sneezing or lifting. It may even be described as a griping pain. It may be very acute. The milder grades may be referred to parts more or less remote from the internal ring, as the back, the epigastric region or the appendix region. The more severe attacks are usually located properly.

Reflex disturbances may or may not accompany the pain. Of these, nausea and vomiting are the most frequent. One of my patients suffered attacks of nausea and vomiting at irregular intervals, often after a full meal, and she had learned by experience that she was obliged to assume the recumbent posture to secure relief, without the knowledge of the presence of a beginning hernia.

Impulse on coughing is spoken of as the most reliable sign, and when it is well developed and unmistakable it is pathognomonic. One is directed to invaginate the scrotum or labium on the finger pressed into the external ring and then ask the patient to cough, when the bowel will be felt to touch the finger. In relation to this test a word of caution should be uttered, for under the conditions above mentioned there will almost always be felt an impulse when the patient coughs. And if one be too enthusiastic about early operations for hernia he may find an expected congenital hernia absent. The difference between one impulse and the other is that in the case of an incipient hernia the impulse is decisive, the bowel hits the finger in an unmistakable way. The other impulse is less distinct and seems to be more the result of a general increase in tension than a local impairment of the abdominal wall.

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THE PUERPERAL PERINEUM; ITS PROTECTION AND REPAIR.*

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As this subject is of general interest, and since it is the experience of very excellent obstetricians that results from primary repair of lacerated perinei are more or less disappointing, I take this opportunity of presenting this subject for your consideration and discussion. I will confine myself to primary lacerations, prevention and repair. I have used all manner of suture material under most favorable conditions, where the patients in the institutions were placed on the operating table and all sloughing parts or apparently devitalized parts carefully trimmed away, and yet I was never surprised to find, after forty-eight hours, more or less, that the stitches were loose or the wound gaping. I think frequently very little more is accomplished than the natural tendency to repair. I have occasionally been surprised to find what appeared to be a serious laceration unite spontaneously.

In my surgical practice, as a rule, at least for a number of years, most of the perineorrhaphies which I have been doing were preceded by an attempt at primary suture. (By the way, the practitioner who never has a laceration in his obstetrical practice either never has many cases or never looks to see.) There are local conditions just postpartum which are inimical to primary union by suture; to these we will refer in a few moments. While resident at the Gebehr Anstalt in Prague I had ample opportunity to give this subject especial study, make some observations and arrive at some conclusions which I think in the main are correct and are borne out by experience in private practice.

As previously stated, conditions inimical to wound repair must be considered. In the early months of pregnancy the vaginal mucosa (and submucosa) is in a state of vascular stasis, assumes a bluish color and is hypertrophic and thickened so that it has a peculiar soft velvety feel—in fact, it is in a state which we might term a physiological edema. In the course of delivery this mucosa as well as the underlying tissues is subjected to contusion, not by sudden impact, but by prolonged pressure, and finally these tissues give way, leaving a ragged, torn wound through the mucosa, muscles and fascia, through any one of these tissues, or through all of them, depending upon the extent and depth

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of the tear. This is followed during the next few days by necrosis and sloughing and by marked swelling and edema. The edema finally subsides and, as a rule, at least the edges of the wound undergo necrobiosis. The deeper structures are somewhat protected by the soft and thickened mucosa, and the reaction in the muscle and fascia is consequently much less, although there is always discharge of fluid mixed with thrown-off cells from these deeper structures.

In Prague, in the Gebehr Anstalt, after delivery, in some cases immediately, and others the next day, the patients were placed upon the operating table, sloughing or excessively traumatized parts pared away under most favorable circumstances, and practically every rent in mucosa and muscle carefully sutured; yet I had to admit that results on subsequent examination were not what might be expected. I could not help but notice that the maximum edema was in the mucosa and that as a result, if the stitches were made reasonably tight, in a few days the swelling would cause them to cut through so that the wound would gap with the stitches hanging loose, or if the stitches were placed loosely the disappearing edema would leave them so loose as to render them practically useless. In that the same condition presented, regardless of the suture material (catgut, silk or silkworm gut), the natural conclusion was that the fault lay in the placing of the suture. For some time I obtained better results from a single purse-string suture introduced through the skin at the vulvar margin, passing under the vaginal mucosa along the border of the rent and tied, allowing some drainage below and locking out the discharge above. While the results are better, yet the pelvic fascia and muscles were not brought into their proper surgical apposition.

The following method of primary repair is rational and surgical and overcomes the objections of the ordinary through-and-through method as before mentioned. All the sutures are introduced in the vagina and of catgut (ten day). The needle is entered through the muscle and fascia, avoiding the mucosa, care being taken that the needle enters deep laterally and picks up a good hold in the muscle. The more muscle included in the stitch the less the tendency to strangulation when the same is tied. The stitches may be introduced, interrupted or continuous, beginning above, and the last one knotted in the vagina, including the sphincter vaginæ, but not transfixing either the mucosa or skin. If the

levator and sphincter are broadly coated with deep sutures, these elastic and stretched muscles will dilate without damage to the sutures. The stitches should be introduced before the placenta is delivered. The structures under the mucosa are very readily picked up so that these stitches in the vaginal canal, placed from above downward, re-establish the continuity of the divided structures, which is all that need be accomplished by any operation for lacerated perineum. The introduction of the stitches in this manner has the additional advantage of not being painful. The mental anguish which surgical interference always produces when the woman thinks everything is or should be happily over with is avoided when our manipulations are at an end with the delivery of the placenta. The placenta acts as a great sponge passing over the sutured area, and, if the sutures are properly placed, in no way interferes with their efficiency.

In lacerations of the third degree much the same condition that is found in the vaginal mucosa is found in the rectal mucosa, where previous congestion with hemorrhoids and dilated vessels have preceded a division of the mucosa by divulsion. In these lacerations the first stitch, a purse-string, entering at the anal border, following parallel to the rent in the submucosa of the rectum and anus, is placed and tied, thus locking off the rectum. A second buried stitch (catgut) is placed above this, including muscle as an additional support to the first stitch. Now a buried gut suture unites the sphincter, and the skin is sutured over these two stitches. The laceration is now reduced to a tear of the second degree and repaired as above described in one or two layers of stitches.

Now a word as to the protection of perineum against laceration. Laceration may be due to some defect, anatomical or histological, in the perineal structures themselves; may be caused by excessive size of the presenting part; may be caused by precipitate passage of the fetal parts through the outlet, not giving time for the gradual stretching and distension, or may be caused by too early extension of the head, so that the head presents a longer diameter while making extension, instead of the lesser diameters as occurs when the occiput has passed well under the pubic arch. Lacerations frequently occur just as the chin is passing over the fourchette, or perineal raphe, since it presents its most angular contour at the most vulnerable part of the perineal body. The shoulders may also cause material lacerations, especially if they extend with

their most angular surface over the perineum in the median line. Frequent examinations, especially with the ungloved hand, and insufficiently lubricated, as well as douches which wash away the natural lubricants, may also be predisposing factors.

Support of the perineum by external pressure, as usually advised, can certainly do no good, except by way of retarding a rapidly advancing head. Additional pressure externally can only add to the contusion of the parts. Toward the termination of the second stage of labor the expulsive pains become more continuous and meeting with a lesser resistance than when the presenting part is passing through the bony structure higher up, they become more efficient, hence the head does not advance and recede as it does higher up, but has a tendency to rapidly advance through the parts. In the upper maternal diameters, before the head engages under the pubic arch, the head advances with the pain and recedes in the interim, allowing a restoration of circulation, a stretching gradual and repeated with the least increase of vulnerability of the parts. To secure this advantage for the perineum, control of the patient must be had at this critical time and usually this can be secured, assisted with mixed anesthesia (morphin-atropin-ether). By explaining the danger to the parts the patient can be urged not to bear down during the pains, and when the head is about to be born it can be deliberately brought through between uterine contractions by voluntary effort on the part of the mother. As the head reaches the perineum the gradual distention may be anticipated and assisted by the introduction of two or three gloved fingers well lubricated, the parts gradually and forcibly distended during the pain. The head should be retarded and precipitate delivery over the perineum prevented by manual pressure upon the presenting head, not upon the perineum. Too early extension should also be carefully prevented. This is probably one of the most important steps in preserving the perineum. The head should be kept in flexion manually until the occiput is well passed under the pubic arch, thus presenting lesser diameters to the outlet when extension takes place. When extension begins, lateral rotation of the head can be secured so that the chin in delivery is made to extend laterally rather than over the median line. Very frequently, if this is not done, all having gone well up to this time, the impinging angular part starts a tear in the fourchette which rapidly extends into the deeper structures. The shoulders, as before stated, should also be carried over the

perineum obliquely by two fingers inserted under the presenting shoulder and carrying it laterally so that its most angular parts shall not engage the most vulnerable part of the perineum.

The second stage completed, careful inspection should be made and all lacerations repaired as above mentioned. Extensive rents in the mucosa should be closed by a submucous stitch placed like ordinary subcuticular stitch. Rubber gloves should always be worn in obstetrical operations. They are a protection to the mother and in many instances are also a protection to the obstetrician.

DISCUSSION.

Dr. David F. Lee, Indianapolis:—I thank Dr. Rosenthal for this most excellent paper and the practical manner in which he has handled the subject. I admire very much the technic he suggests for the repair of the perineum and quite as much his suggestions for protecting the perineum.

Dr. C. H. English, Fort Wayne:—In recent years I have been using for suture material the ten- to twenty-day chromicized kangaroo tendon. I think it is more elastic and is better in every particular for this repair work than any other material I have used. In regard to catching up the lateral pelvic fascia, we do not appreciate the importance of proper apposition and care of the pelvic fascia, as well as the muscle. As Dr. Rosenthal has said, these lateral sutures should be deep and the tissues should be carefully coapted. There should be no necessity for hurry, and we should draw every stitch just so tight and no tighter and we will have better results.

Dr. H. R. Allen, Indianapolis:—I have had the opportunity in Fort Wayne of seeing some of Dr. Rosenthal's cases. He is certainly most skillful in his manipulations and plastic work and his results are ideal, and from the standpoint of manipulation and the beautiful way he expresses himself in the paper I want to congratulate him.

Dr. Holland, Bloomington:—The paper of Dr. Rosenthal is thorough and gives us what can not be found in the text-books. The introduction of sutures is essential in all cases torn, except perhaps cardiac and nephritic cases, which I think present such a variation as to make it advisable to wait for the secondary operation period. I have had a few cases like that. In general practice we are often confronted by lack of hospital facilities, proper assistants, etc., and being a great distance from headquarters, and if these sutures are introduced they almost always pull out. We can not make them tight enough to get apposition, and failure is more frequent than a good result. The question of suture material would

vary according to the results obtained with that material. Chromicized catgut seems to be the prevailing material. The position the child assumes in delivery can be controlled by the operator, and I think that has never been sufficiently accentuated by the text-books. The head can be slightly rotated so that the chin and angular presenting parts present laterally on the perineum rather than in the median position. The fourchette presents another easily torn part, and having once begun to tear it continues very easily, as Dr. Rosenthal has told us. The shoulders and elbow are frequently guilty of beginning a tear which is completed by the breech, if it be large. The shoulder in being rotated so as to make it present laterally, puts the other shoulder in a more anterior position to the child's body, decreasing somewhat the diameter of the shoulders.

Dr. Jane Ketcham, Indianapolis:—I like Dr. Rosenthal's point about the support of the perineum. When you support the perineum the force is directed at a tangent with the force from the head and the force is rather in the line of least resistance rather than the way you want it to be. The method of Dr. Varman, of Berlin, is a good one. By simply pushing the head down with the thumb on the occiput as it passes under the symphysis, and when it comes to extension pull up with the fingers. The force is just exactly where you want it to be and can be easily controlled with much less effort on your part, and it has the advantage that the mother has no conception that the labor is being delayed, which is always the impression they get. The perineum does not necessarily have to be touched at all. The hand, also, does not have to go into the vagina and there is less danger of infection.

Dr. T. B. Noble, Indianapolis:—Oftentimes the ill results that come from operative procedures at this time are due to faulty light. I have been using for some time one of those single dry cell hand electric lights, which can be snapped in connection and brought directly to bear upon the field of operation. It is ample and sufficient and helps out in a practical way very materially.

Dr. G. Link, Indianapolis:—I should like to add the suggestion that all women who are child-bearing should be examined before labor in order to determine the size and strength of the levator ani muscle, and especially with regard to the thickness of the so-called pubo-vaginal levator. There are two reasons for this: In those with heavy pubo-levatores we may expect to have bad tears. Examining it after the labor has been finished, if we do not find it in the condition it was before, even though we do have a very slight tear of the skin, we should repair this muscle, for

therein lies the trouble, and not in the large, gaping skin and mucous membrane wound.

Dr. M. I. Rosenthal, Fort Wayne (closing):—I only again emphasize the importance of securing union after primary operation for laceration of the perineum. The fact that one has a deformity, a large lacerated tube where the vagina ought to be, is a secondary matter, as the consequent increasing pathological conditions which will follow the destruction of the musculo-fascial diaphragm of the pelvis, prolapse of the uterus, subinvolution, tubal disease, prolapse of the rectum, of the bladder, with consequent cystitis and pyelitis, etc., can be prevented by a properly executed secondary operation, but the straightening of the rectum with the consequent danger of infection of open tears in the vagina as well as the uterus and the periuterine vascular areas, is a matter of immediate importance. It is this necessity for immediately restoring the normal backward direction of the rectum to which I also desire to draw attention in this paper.

REASONS FOR THE RADICAL OPERATION IN INGUINAL HERNIA.*

THOMAS B. EASTMAN, M.D.

INDIANAPOLIS.

There are few abdominal conditions wherein prompt and efficient intervention promises so much; few in which the dilatory makeshift methods of the past promise so little, as in the various forms of incarcerated or of strangulated hernia of the inguinal region.

The refinements of modern aseptic surgery have brought to the truss wearer a release from the annoyance and uncertainty of this artificial support which will eventually be relegated to oblivion along with many other devices whose only recommendation is the very doubtful one that they avoid a surgical operation.

At the time when the peritoneum was a *noli metangere* and before herniotomy was brought to a point of approximate surgical perfection, both in its technic and results, the truss, doubtless, served a useful purpose, but it is no longer a device either of necessity or of election. Furthermore, it often lends a sense of security not to be depended upon, for not rarely have cases come to the notice of surgeons in which the incarceration of the intestine occurred after the patient, after having removed the truss, had retired.

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

In point are the cases of two farmers of advanced age, who having retired after the ingestion of a heavy meal somewhat distressed by the accumulation of gas in the intestines, were awakened during the night to find the scrotum distended and themselves unable to reduce the hernia for the first time in many years.

Again, the truss used over a long period of time without doubt tends to increase the hernial opening, since in the very nature of things any pressure on the ring sufficiently firm to retain the viscera within the abdominal cavity will stretch the already more or less relaxed pillars after a period of time.

Nor is this all. No man wearing a miserable truss is capable of work up to his full efficiency. If he attempts any particularly heavy work, he does so at the risk of his life, particularly if having had an irreducible descent he falls into the hands of such members of our profession as believe that taxis should be employed even to the death of the gut from assault and battery.

Dr. G. Paul La Roque, of Richmond, Va., in a paper published in the *Virginia Medical Semi-Monthly* of Dec. 26, 1907, says: "A certain amount of enteroptosis is a part of the pathology of the affection, and in many cases a distorted structure and position of the enteric canal are present and progressive in severity.

"The recurrent colic, indigestion and other functional disturbances forming a part of the symptom-complex of most hernias are attended by the same impairment of health and danger of gastroenteric catarrh due to other causes, in addition to the menacing effects of the hernia itself.

"The recurrent, often constant, backache and general fatigue incident to complete and often incomplete hernia caused by irritation, traction upon and distortion of the delicate, highly organized nervous structures within the peritoneal cavity, are often debilitating and causative of semi-invalidism.

"It is difficult to estimate even approximately the number of vague cases of indigestion, obscure backache, and other such common and generally miserable complaints due to this cause."

Naturally the question arises as to the province of the truss in children. Perhaps in children the truss treatment, as a routine practice, may be seriously considered, since perhaps two-thirds of all cases of inguinal hernia in children under 4 years of age get well under treatment by the truss. This, however, in the very large majority of such cases, should be regarded as spontaneous cure and not as truss cure. The best that can be said in behalf of the truss in such cases is that it arrests the descent of the hernia at the external

abdominal ring, thus possibly preventing an increase in the size of this opening and, in addition, protecting the individual, no doubt, to some slight degree against strangulation.

It should be noted, however, that a large number of surgeons, both in this country and abroad, are now advocating operation as the primary method of treatment in infants. Coley, who advocates truss treatment in children, enumerates the following important exceptions. He says, first: "If there is a history of strangulation that has become reduced by taxis, I believe that an operation is indicated, no matter how young the child.

"Second, in cases in which, despite carefully directed truss treatment, the hernia has become irreducible, I think early operation should be advised.

"Third, in cases in which the rupture can not be controlled by a truss, and as a consequence is gradually increasing in size.

"Fourth, in all cases of femoral hernia, the reason for prompt operation in this class being that a cure by persistent truss treatment is practically unknown at any age.

"Fifth, immediate operation is indicated in all cases of hernia associated with reducible hydrocele or fluid in the hernial sac, inasmuch as it is impossible to control the rupture by means of a truss, and there is, hence, nothing to be gained by waiting."

A careful perusal of Coley's exceptions leads one to the conclusion that they include practically all cases.

Likewise, taxis along with its associate, the truss, must pass to the museum of surgical antiquities, except as it is used by the old truss wearer. Its employment should rarely be made by the physician or surgeon except most briefly and most delicately.

If taxis will safely reduce an incarcerated intestine, it will do it quickly. And even though the intestine after prolonged manipulation with its necessarily ensuing trauma be replaced, the question as to whether the intestine will be restored to normal becomes a serious one. Indeed, who can say whether it ought to be replaced or not.

The condition of the intestine will depend more upon the amount of constriction it has suffered than upon the length of time it has been incarcerated.

Frequently, with the tissues incised down to the intestine and the ring and with the former directly in the grasp of the fingers, it is difficult or even impossible to replace the intestine without enlarging the ring; then how can one expect

successfully to carry out the manipulation with the skin, fat and other tissue intervening between the fingers and the involved gut?

In short, the hernia that can be reduced by taxis is in no dire need of reduction.

It is not the intestine which descends through the large ring in the old truss wearer that gives rise to grave symptoms, as illustrated in one of the cases mentioned above, in which the intestine had been incarcerated for eight days and at operation seemed but little the worse for its excursion to parts without the abdomen. Far more grave are those cases in which the intestine descends through a small ring known to exist or where the patient, formerly sound, strains himself by great muscular effort and finds his scrotum filled with abdominal viscera. In such a case as the latter, so rapidly did sphacellation ensue that at operation twelve hours later the intestine could be picked to pieces with the finger.

Occasionally there appears a case in which the history is to the effect that the patient had a lump in the groin for a period of months or years without symptoms. Later, after some muscular effort, distressing symptoms come on with evidences of intestinal obstruction, although there is but little depression, a temperature not subnormal and a good pulse. In three such cases the writer found the omentum densely adherent around the entire circumference of the ring, the intestine which had distended being so protected by its cushion as to give rise to few serious symptoms and, upon operation, to seem little injured.

If after very gentle and very brief manipulation the intestine can not be returned to the abdominal cavity, it becomes the plain duty of the attending physician to resort to surgery either at his own hands or that of a competent surgeon. He must decide at once to do away with brute force and brook no delay. If resort to surgery is had promptly, it will often decide whether the physician continues or gives way to him who is pleased to call himself a funeral director.

Done promptly, the operation is a simple one. It is nearly always necessary to enlarge the ring by incision, and in this necessity we have added proof of the futility of attempting to reduce through skin and subjacent tissues what we can not reduce short of a considerable enlargement of the ring.

But if for various reasons the doctrine of procrastination has prevailed until upon operation the intestine is found black, friable, its luster gone, then resection is demanded. And here it may be said that it is better to err in resecting an intestine which might have restored itself than to return one which is not viable, since by

the commission of the former error the patient has a chance for life; by the latter error, none whatever.

Having determined upon resection, our experience has led us to believe that the Murphy button affords the greatest opportunity for success.

Frequently these operations must be made in country houses after nightfall and with surroundings far from ideal and our patients oft-times in *extremis*. And while using suture methods in other forms of intestinal surgery, the button gives us a method by which the work can be done quickly and, so far as our experience goes, in a large percentage of cases successfully.

If the writer has made upon his hearers some small impression as to the paucity of those cases of strangulated or incarcerated hernia which are amenable to reduction by manipulation, he has accomplished his purpose in reading his paper.

DISCUSSION.

Dr. David F. Lee, Indianapolis:—I fully concur in the many good things Dr. Eastman has said and believe, as he says, that the time will come when the dangerous instrument known as the truss will be relegated to the past. In this day of clean surgery, of perfect technic, this day when we recognize deformities and correct them, to advocate, as I have in my paper, the examination of the region of hernia in children the same as we do the eyes and nose, and, inasmuch as hernia is always due to congenital defects, correct them in infancy or early childhood at least, is the proper procedure. As the wearer of a truss becomes older he becomes more indifferent about his condition, and the first thing he knows he comes down with a strangulated hernia. Many times there are contraindications for operation and he dies. I firmly believe it is our duty to correct in childhood congenital hernia the same as clubfoot. The truss is at best a makeshift, and many times at operation we find evidences that the wearing of a truss has complicated conditions and favored strangulation.

Dr. J. H. Oliver, Indianapolis:—There are a few surgical emergencies for which every medical practitioner should fit himself, however much he may be opposed to surgical procedures in the main, and one of them is strangulated hernia. I have recently been called to operate one of these cases in the very center of another state, and when I asked why a local man was not employed was assured that there was not a man in that vicinity who would think of doing the operation. I am pleased to say this did not occur in Indiana. A couple of English surgeons have recently called the attention of the profession to the danger of

reducing hernial masses *en bloc*. Nearly 200 of these cases have been studied. The word taxis causes cold shivers along my spine. I believe thoroughly that a hernia that can be reduced is in no particular danger and will reduce itself if let alone long enough. But taxis is something that should be obliterated. In a case operated within the last few weeks the gut had sloughed off and dropped back in the abdominal cavity after four days of waiting.

I do not look upon resection of the bowel with that lasting hope that the author of the paper seems to express. Operating anywhere in the middle of the night with artificial light does not give me results in resection of the bowel that I consider ideal. Now while I do not wish to be understood as advocating the replacing in the abdomen of gangrenous bowel, yet there is a little bit of technique that I have used for some years that has resulted well. In operating a case ten or fifteen years ago there were suspicious-looking spots in the bowel. I took a piece of iodoform gauze and with a No. 0 catgut took two or three stitches in the omentum superiorly and inferiorly and brought the whole thing out through the opening. Seven days afterward it let loose and I had a beautiful fecal fistula. Three or four weeks afterward the man was sound and well and went back to work. On a hunting trip afterward the fistula opened again, but under rest in bed promptly healed and he has been well ever since. I have employed this a goodly number of times, and only recently in a man 72 years old. Slipping the suspicious gut, enveloped in a bit of gauze, back into its natural habitat a fistula opened on the sixth day. In three weeks he was out at work on his farm, showing that this is a safe procedure. During this time I have both resected the bowel and used the Murphy button, and they have died. Every case in which I have used this procedure has gotten well, and I think it is worthy of consideration.

Dr. E. D. Clark, Indianapolis:—Agreeing with Dr. Eastman, my idea is that strangulated hernia should be operated before it becomes strangulated. As soon as we have made a diagnosis of hernia we have a surgical case, and the more quickly and the more strongly we advocate this the better it will be for humanity at large. A case I had about three weeks ago illustrates one danger not mentioned here. A part of the strangulated mass had been reduced and a part of it left in the sac and had been there for two years, and when I opened the sac I found the omentum had undergone a change which appeared to be either tuberculous or malignant. Examination proved it to be an endothelioma.

So there is danger of allowing even omentum to remain unreduced on account of the pathological change that may take place.

Dr. M. I. Rosenthal, Fort Wayne:—Ferguson has indicated that the pathology of inguinal hernia, at least, is due to the faulty attachment of the transversalis and internal oblique tendon. The proper treatment, therefore, is to restore the normal attachment. The question of operating young children has long been a debatable one. I have seen patients in my practice upon whom I placed a truss in infancy grow to manhood and they have no hernia. In the face of this I can not say we should abandon the truss entirely; but I will say that in the last ten years I have not placed a truss upon any individual who was not an infant in arms or had some disease of the lungs or heart which contraindicated operation. In children I do the Ferguson operation. There is danger of atrophy in handling the cord in children. In adults I do the Bassini. So far as the use of sutures or the button is concerned, that depends upon the habit of the operator and the speed with which he can work. In femoral hernia, however, where the ring is necessarily small, you will find considerable difficulty in returning the bowel through the ring in using the button. Personally I have been using the button less often. Now I can see that the use of iodoform gauze for the purpose of draining a suspicious bowel may at times be very good, and I may in the course of the next two weeks have occasion to use it, but from the surgical standpoint it is not ideal. In the first place resection is not difficult, and I have not found the mortality excessive, and it is probable that Dr. Oliver has run across an unusually unfavorable class of cases. My experience has been most satisfactory, and this includes, by the way, one case reduced *en bloc*. The vomiting and pain had ceased, but the incarceration was internal, and we found three feet and two inches of dead bowel because of embolism due to trauma consequent upon excessive taxis. This three feet and two inches of bowel was resected with a perfect result. In another case of umbilical hernia reduced by taxis the vomiting had ceased, the pain was gone, but the pulse stayed up and there was a condition approaching collapse. Notwithstanding this the patient was brought from Columbia City to Fort Wayne, a distance of twenty miles, placed on the table and eighteen inches of absolutely gangrenous bowel resected, with a perfect result. In another case of reduction *en bloc* the pain and vomiting had ceased. The bowel was brought out and was apparently devitalized. Sponging with saline solution for a time, the circulation re-

turned, the bowel returned and a perfect result was had there. So far as old people are concerned, I should like to have the opinion of the essayist. I have been surprised to find how nicely they stand operation.

Dr. H. G. Nierman, Fort Wayne:—It is important in these cases that the healthy portion of the bowel and the stomach should be cleaned and drained. If necessary it should be drained by any method, such as putting in a catheter. The poisons created by the bowel contents is what may kill the patient even after you have operated and think they are going to return to their normal selves.

Dr. T. B. Noble, Indianapolis:—As long as we have hernia I believe we will have to contend with the truss. I have no doubt there are men in this room who know all about the dangers of hernia and truss, but who are wearing trusses. Personally I am opposed to the truss and agree with everything that has been said against it and against taxis, and would suggest this idea relative to taxis. We have cases many times in which we are refused operation. The doctor is compelled to do something. In such cases I would suggest that taxis be refused and that operation be urged. It is a good time to drive home the arguments in favor of operative procedures. As to technique, these cases present a wide field of difference in management. While I think the Murphy button is one of the most ingenious devices ever presented to modern surgery, yet for myself I would rather use the suture method, because I believe I can do an end-to-end anastomosis about as quickly as I can put in a Murphy button, and I feel a good deal easier to know there is no foreign body in the intestinal tract which must pass at some future time and may cause further trouble.

Dr. J. R. Eastman, Indianapolis:—As Dr. Lee says, we still have saloons, but not so many as formerly, and so we may continue to have the truss, but we have not as many as ten or fifteen years ago. I have had to deal with more than 200 cases of hernia and I have never put a truss on anybody. I have always been able to persuade my patients that the proper thing to do was to have the parts restored to their normal anatomic relationships. I believe to put a truss on a hernia is about like stuffing an old pair of overalls through a pane of glass, whereas to operate radically is to reglaze the window. The truss is a poor makeshift at any rate. The truss belongs to the preaseptic era, and the time is not far distant when it will be consigned to the lumberyard and the museum of antiquities. I subscribe to the statement of Dr. Clark that every strangulated

hernia should be operated before it becomes strangulated. This is driven deeply into the minds of every surgeon who has to deal with them. I have never had any trouble with children. I believe they stand it well. We do the Czerny operation in which the sutures are passed through all the layers. The child bears the operation well and is relieved of the awful possibilities that hang over the patient like a Damoclesian sword, ready to cut his head off. I saw a case of strangulated hernia day before yesterday, in a city in Indiana, which had been diagnosticated obstruction of the bowel. Here was a woman with a tumor the size of the butt end of an egg at the femoral opening, with all the symptoms of ileus. She was in the hands of two prominent physicians, one of whom had recognized it and the other had completely overlooked the hernia as the cause of the obstruction. We would not believe a competent man would overlook so important a landmark. The woman said there was no pain, the lump did not change in size when standing or lying down and there was no fluctuation, there was nothing peculiar about the percussion note. It felt like a fatty tumor, a lipoma, and I am sure I felt very doubtful about it being a case of obstruction. On opening the abdominal wall in the median line, which should always be done, here was the gut jammed down through the ring, and black. I think the patient is dying. I wish to put myself on record as saying that before a dozen years roll around we will look with a good deal of condemnation upon the truss. There is no age limit for operation. If the patient is so ill that he can not stand any surgical operation, of course, he will not stand this operation, but that is rare. But those that have been neglected so long must keep the truss on. They should have been operated fifty years ago.

Dr. C. H. McCully, Logansport:—Two points I wish to emphasize. One is the statement made by Dr. Eastman as to the age limit. Two of my most satisfactory cases of operative interference were at the extremes of life. The other point I wish to emphasize was brought out by Dr. Nierman, the flushing of the bowel and clearing it of all toxins as early as possible. The fatal cases die from toxemia and not from peritonitis.

Dr. T. B. Eastman (closing):—So far as Dr. Rosenthal's question as to the way in which old persons stand these operations, my experience is that they stand it surprisingly well. There has been some discussion as to pain in these cases of strangulation. I simply wish to say this and try to impress it upon you, that dead guts tell no tales, and it is a very good thing to remember.

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EDITORIAL

THE FRENCH LICK SESSION.

The 1908 session of the Indiana State Medical Association, held at French Lick June 18 and 19, can be said to have been fairly successful notwithstanding numerous drawbacks. The attendance was not as large as usual, but this was to be expected, considering the fact that the session followed so closely the Chicago session of the American Medical Association, which Indiana medical men attended in large numbers. No doubt many physicians felt that they could not afford the time and expense required to attend two sessions so close together, and, therefore, chose to attend the A. M. A. session as offering the greater benefit. Then, too, French Lick is not easily reached, especially by those living in the northern part of the state, and many no doubt remained at home rather than make the long and tiresome trip, with numerous changes of cars, during one of the hottest weeks we have had this year. But French Lick is a delightful place for a meeting, and the Association lacked nothing in the way of splendid accommodations and excellent entertainment at the hands of Mr. Taggart, who was the real host for the Association at its French Lick session.

The scientific program was above the average, and it is regretted that some of the excellent papers were presented to small audiences or read by title owing to excessive heat which drove the members to seek cool places in the park rather than confinement indoors to listen to papers and discussions. The addresses of the guest of honor, Dr. J. M. Anders, of Philadelphia, and the president of the Association, Dr. D. C. Peyton, of Jeffersonville, printed in the July number of *THE JOURNAL*, were of exceptional merit and greatly appreciated by the members. Numerous other valuable contributions were worthy of note, and particularly the papers forming the two or three symposia on the program, all of which will appear in future numbers of *THE JOURNAL*.

An unfortunate arrangement, and one which we hope can be changed at future sessions, was the conflict of the meetings of the House of Delegates and the meetings of the sessions. The resolution passed by the House of Delegates requiring the printing of the reports of all officers and committees in advance of the session, thus doing away with the reading of such reports at the session, will materially shorten the time required by the House of Delegates to transact the business of the Association.

The amendment to the by-laws, making the fiscal year of the Association the period between January 1 and December 31, and requiring the payment of all dues on January 1 of each year, will greatly aid in the proper business management of the Association and do away with the misunderstanding heretofore existing as to when dues are payable. It also greatly facilitates the work of keeping a record of the subscriptions for *THE JOURNAL*, as a provision of the amendment requires that dues, which include a subscription for *THE JOURNAL*, shall be paid in advance for the year, and any member failing to pay the dues by February 1 stands suspended and is not entitled to the rights and benefits of the Association.

Another important action of the House of Delegates was the change of season for holding the annual session, it being unanimously decided to hold the next session in the fall of 1909, preferably the last week in September or the first week in October, the exact dates to be decided by the officers and the committee on arrangement. It is thought that this change will result in a larger attendance and increased interest and enthusiasm in the scientific work. It certainly will be a distinct advantage to have the session at a time when it does not conflict with the annual session of the A. M. A., and, as the fall is one of the most delightful seasons in Indiana, the attendance ought to be larger than ever before.

The new president of the Association, Dr. Geo. D. Kahlo, of French Lick, is well known and popular all over the state, and for many years he has been an active and influential worker in the Association. He was formerly dean of the Central college of Physicians and Surgeons of Indianapolis, and now holds the chair of professor of medicine in the medical department of Indiana University.

The selection of Terre Haute as the place for holding the next session gave general satisfaction. Vigo County has a large and progressive medical society, and no doubt the physicians of that county and of the city of Terre Haute in particular will entertain the Association in a highly creditable manner.

RECENT STUDIES ON SCARLET FEVER.

In the July number of the *American Journal of Obstetrics* occurs an article of the above title by Dr. Anna W. Williams, of New York City, based upon studies carried on at the Research Laboratory of the Health Department for the last five years. During the past year an increase of about 200 per cent. in the number of cases of scarlet fever has been observed in their contagious disease hospitals and the majority have been of the moderately severe type with marked streptococcæmic sequelæ, deaths occurring late and apparently as a result of the secondary lesions, the total death rate being about 7 per cent.

Despite the early recognition of the disease (Sydenham, 1685) definite knowledge is still lacking upon many points, such as the chief site of the virus and source of infection, the duration of infectivity of the virus, the exact period of incubation, the pathognomonic symptoms, the only one of which may be said to be the enlargement of the papillæ at the tip and sides of the tongue, and lastly the minute pathology of the disease. The only constant change found is a universal hyperplasia of the lymphatic tissue and the only characteristic change reported is the appearance of the bodies described in 1903 by Mallory, who found in four scarlet fever autopsies, bodies resembling protozoa. He found none of these bodies in the skin of living cases. The name cyclasterion scarlatinale was given because of the more common radiate forms. In the above-named laboratory, Field, after an examination of the skin from twenty living cases and ten autopsies, with a number of controls, concluded that practically all of the bodies were degenerations of the cytoplasm of the host cells. From a further examination of the skin from seventeen living cases, thirty-three autopsies and nine controls, the same conclusion was reached, viz., that the bodies were not organisms, the same cycloplasmic change being found in the skin of a control whose death had occurred from a severe burn. Nor was the tiny organism described by Prowazek isolated in any case. More promising results seem to offer from a minute histologic examination of the exudates and superficial tissues of the mouth and nose, and perhaps the general lymphatic system.

Although the streptococcus pyogenes can not be assigned as the real cause of the disease, yet there is no question as to its rôle in the secondary lesions and sequelæ. And yet Park's observations in the Vienna clinics on the use of antistreptococcic serum were disappointing. In certain gland and joint cases, where the prognosis was

bad, Wilson, of the Contagious Disease Hospital, has made use of streptococcus vaccines, with encouraging results, although the number of cases so treated has been too few for positive conclusion.

The failure of the antistreptococcic serum and the apparently successful use of the streptococcus vaccine bring up once more the question of the importance of using autogenous vaccines rather than depending upon an unknown strain of the infecting organism for an immunizing or antibacterial effect.

But as far as the true etiologic factor of the disease itself is concerned, we seem about as far away as was Sydenham. Therefore let it be hoped that the work will go on until the second commonest infectious disease will be as clearly elucidated as that caused by the Klebs-Loeffler and Koch bacilli.

WHEN TO OPERATE FOR INTRA-ABDOMINAL HEMORRHAGE DUE TO TUBAL PREGNANCY.

The above was the subject for a most interesting symposium at the recent meeting of the American Gynecological Society, and as was remarked by Dr. Joseph Taber Johnson, "one was struck with the differences of opinion that had been expressed by the fellows as well as with the difficulty of attempting to decide why so many doctors disagree."

It was generally conceded that there were only about 5 per cent. of these cases that were of the "tragic" or so-called "cataclysmic" type, in which the life of the patient was in immediate danger from the acute hemorrhage. So that in 95 per cent. of the cases the first hemorrhage will cease with the depression of the heart's action from the actual loss of blood. In this latter class some surgeons advise waiting until the symptoms of collapse have subsided and the patient given time to react and be brought into a better operative condition. *Pari passu*, who can say whether a case is to be of the fulminating type and end like the 5 per cent. of "tragic" cases or whether it will fall under the larger group of 95 per cent. that will seem to recover from the first hemorrhage, or what right have we to expect that, once the patient comes out of the collapse attendant upon the initial hemorrhage and the heart regains some of its lost vigor, the eroded vessels will not again begin to bleed? And, too, even though a woman with a ruptured tube be for-

tinuate enough to suffer but the one hemorrhage there is the liability to infection awaiting the extensive abdominal or pelvic hematocele, the suffering attendant upon adherent pelvic structures or perhaps a fate similar to the case reported by Robb in which the patient died on the tenth day after a deferred operation from volvulus due to intestinal adhesions. Given a dextrous operator with experience and celerity, and it seems reasonable to suppose that there is a greater chance of obviating these latter complications by a quick removal of the clots, placenta and fetus, if found, together with the ligation and removal of the lacerated tube, a gallon of warm saline left in the belly, and a rapid closure of the belly, further shock to be combated by intravenous or subcutaneous injection of a saline solution, than by deferring the operation until the patient is either dead or a chronic invalid. And this opinion was shared by a goodly number of the contributors to the symposium, among them Janvrin, Vineberg, Montgomery, Frederick, Grandin, Manton, A. Laphorn Smith, Bovée, Currier, Ehrenfest, Pfannenstiel, Brooks Wells and J. T. Johnson. Krug believes in a happy medium, neither delaying operation as long as has lately been advocated by some, nor yet subjecting the patient to a precipitate laparotomy. Among those who seem inclined to wait are Simpson, Boldt, August Martin, Gordon and Robb.

Lawson Tait, of Birmingham, the pioneer of ectopic pregnancy, who, in 1883, performed the first laparotomy for a fully ruptured tubal pregnancy, did well when he pointed out that tubal pregnancy was never a medical, but always a surgical disease. And in the light of our present knowledge on the subject, how utterly fallacious does the old time galvanic therapy appear! Although Tait believed that it was impossible to diagnose unruptured tubal pregnancy and once declared that "no living man had ever made a diagnosis of extrauterine pregnancy before rupture," yet so fully convinced was he of the possible danger to the patient that he afterwards declared that "if there be any reasonable suspicion that there was a tubal pregnancy which had not yet ruptured, I should recommend operation." Fortunately Tait's teaching has by now been so greatly improved upon that many cases of the unruptured variety have been diagnosed, operated upon, and reported. As far back as 1887, Janvrin pertinently remarked, "in any case in which from the rational and physical symptoms I became convinced that I had to deal with a tubal pregnancy, even before symptoms of a rup-

ture in the peritoneal coverings of the tube occurred, I should most earnestly urge laparotomy and perform it if I could obtain the consent of the patient. Even if mistaken in my diagnosis, I should find something which ought to be treated surgically." And again our knowledge of the etiology and pathology of extra-uterine pregnancy teaches us the wisdom of such a policy. By the removal of an offending pus tube in such a case, many a woman would be saved the risk of a future extrauterine conception with its certain termination. Hence we are constrained to conclude that the time to operate for intra-abdominal hemorrhage due to tubal pregnancy is not one day or one week after it has occurred, nor the same day nor hour, but to urge upon our patients with old inflammatory conditions of the tubes the danger of allowing them to remain dormant, ready to start a fire at any moment, or in other words, operate before extrauterine conception has taken place, just as we would remove an appendix which has given signs of inflammation, before it becomes the seat of a pathologic condition that actually threatens the life of the patient.

EDITORIAL NOTES

TERRE HAUTE in the fall of 1909.

WE hope and pray for reasonably cool weather in Terre Haute.

It was oppressively hot at French Lick during the annual session, but we learn it was hot everywhere else in Indiana at that time.

WE have a few back numbers of *THE JOURNAL* which we will be pleased to send members for completing their files if request and statement as to numbers desired is made.

EVERY physician in Indiana who is not a member of any medical society, but eligible to membership, should be induced to join the medical society in the county in which he lives. If our county medical society secretaries will put forth a little effort applications for membership can be secured from a large number of these eligibles. To aid in the work we will send sample copies of *THE JOURNAL* to all eligibles whose names and addresses are furnished us.

THE two leading political parties have placed "health planks" in their platforms. The Democrats have gone a little further than the Republicans in their advocacy of measures for the promotion of public health interests, but both parties have taken steps in advance, which promise much for the common good if the measures advocated by either party are carried out. Considerable credit is due Dr. Geo. D. Kahlo, president of the Indiana State Medical Association, for his work and influence with the committee on platform at the Denver convention, as he personally appeared before the committee and urged the adoption of such a plank as has been placed in the Democratic platform.

HON. THOMAS R. MARSHALL, the Democratic candidate for Governor of Indiana, has publicly placed himself on record as favoring an increased appropriation for the State Board of Health, and an increased salary for the Secretary of the board, who is one of the most capable, energetic and efficient health officers in the United States. Mr. Marshall has always appreciated the real value of public health work, as he has always been a consistent friend and supporter of the medical profession. Perhaps this is due to the fact that he is a son of a medical man, though we are more inclined to believe that it is due to that broad-mindedness and logical reasoning which always leads to the recognition of those things which are good for the public welfare.

THE nostrum manufacturers are making frantic efforts to overcome the injury done them by the work of the Council on Pharmacy and Chemistry of the A. M. A., and physicians are more frequently than ever visited by the detail man and showered with samples and literature. The most effectual way to suppress the nostrum business is to refuse to use or prescribe nostrums, and the detail man from the nostrum manufacturer should be politely but firmly informed that he wastes his time in talking to you, and that his samples will not be accepted. Any firm that can not obtain approval of its pharmaceutical preparations by the Council on Pharmacy and Chemistry of the A. M. A. is unworthy of patronage either directly or indirectly by any physician who desires to prescribe for his patients in an intelligent manner.

SOME of the medical directors of Indiana life insurance companies were at French Lick with their war paint on trying to head off any action

of the Indiana State Medical Association on the question of reasonable and just fees for life insurance examinations. For their benefit we desire to say that the Association has already put itself on record as favoring the \$5 fee and urging its members to secure such fee for all complete life insurance examinations. But aside from this do the medical gentlemen who are doing their best (or worst) to keep their fellow practitioners from securing adequate compensation for professional services rendered feel particularly proud of the stand they are taking? Would it not look a little better to let the medical profession fight out this question of fees with the insurance companies without encountering the unwarranted and unprofessional opposition of a few medical men who ought to be willing to assist their medical brethren in obtaining what is reasonable and right?

THE BOARD OF HEALTH for the City of Fort Wayne, headed by its efficient secretary, Dr. H. O. Bruggeman, is actively engaged in not only enforcing city ordinances and state laws pertaining to public health, but in efforts to educate the public concerning the prevention of disease and the preservation of health. At this writing the board has caused the arrest of several milk dealers for delivering milk and cream not up to standard in quality or of the temperature required by law, and through newspaper articles and circulars the public is kept advised as to the requirements of the law, the reasons therefor, and a plea made for the support of the regulations in the interest of the public good. The secretary of the board has recently caused to be printed in the daily papers of Fort Wayne a plain but forcible article on the feeding of babies in hot weather, with instructions concerning the proper preparation and care of the food for the baby. The information given ought to go a long way toward aiding in the lessening of the morbidity and mortality among children. The example could with profit be followed by municipal and county boards of health all over the state, for the enforcement of public health laws and the education of the public concerning rules of health must come from public health officers, encouraged and aided by the members of the medical profession, individually and collectively.

DEATHS

DR. NOBLE P. HOWARD died at his home in Greenfield Tuesday morning, May 26. He had suffered for the last four weeks from pneumonia.

DR. HOMER N. SHAW, of Gaston, was accidentally drowned in Tippecanoe Lake, Kosciusko County, Indiana, Sunday afternoon, June 7. At the time of his death he was a member of the Delaware County Medical Society. He was 30 years of age.

DR. L. M. BLACK of Greencastle, died at his home Thursday, July 18, of gastro-enteritis. He was born in Lawrence County, Ind., Feb. 5, 1843, and graduated from the Miami Medical College in 1871. He has been a secretary of the Board of Health of Greencastle, United States pension examining surgeon, and member of the city council.

DR. W. T. WILLIAMSON died at his home in Fort Branch, Ind., July 22, 1908, from pyemia resulting from a carbuncle on his neck. He was born in Crowland, Lincolnshire, England, in 1844, and graduated from the American Medical College (Eclectic), of St. Louis, in 1879. He practiced in Hazleton, Ind., for three years, in Olney, Ill., for four years, and in Fort Branch for twenty-two years. He was a member of the Gibson County Medical Society and of the Indiana State Medical Association at the time of his death.

DR. J. C. F. THORNE, for many years one of Kokomo's foremost practitioners and a former mayor of that city, died at his home in Kokomo Sunday, May 24. Death resulted from an illness of three years, following a street-car accident in February, 1905. While driving to his office his buggy was struck by a street car, and in the crash he received an injury to the head, which resulted in general paresis. He was born near Alto, Ind., Sept. 26, 1857, and graduated from Rush Medical College in 1883, soon beginning the practice of medicine in Kokomo.

DR. M. O. LOWER, of North Manchester, died at his home Sunday morning, May 24, from diabetes and a complication of diseases. He was one of the best known and most highly respected physicians of Wabash County, where he had practiced for many years. For many years he had known the nature of his malady and that he could not long survive, yet he continued his large practice almost to the day of his death, and at the same time continued to be an active and progressive student. Even during the last few months of his life he began a thorough and painstaking study of electrical therapeutics, work that was continued up to the day of his death. He was an ex-president of the Wabash County Medical

Society, secretary of the North Manchester Board of Health and for a number of years was a member of the North Manchester School Board. He was a member of his county and state medical associations, as well as of the American Medical Association.

PERSONALS

DR. O. P. KEMP, of Center, has moved to Kokomo.

DR. W. C. BLACK, of Marion, has located at Okmulgee, Oklahoma.

DR. G. W. H. KEMPER, of Muncie, is recovering from a surgical operation.

DR. LOREN W. SMITH, of Wabash, has recently returned from a visit in Pennsylvania.

DR. AND MRS. EDWARD AUGUST WILLIS, of Indianapolis, announce the birth of a son.

DR. F. W. CREGOR, who has been practicing at Carthage, Ind., has located at Greenfield, Ind.

DR. EARLE S. GREEN and Miss Mary Kinert, of Muncie, were united in marriage May 27, 1908.

DR. L. A. SIMMONS and family, of Kokomo, who spent the winter in Florida, have returned home.

DR. HERMAN S. BOWLES and Miss Margaret Scott, of Muncie, were united in marriage June 10, 1908.

DR. J. H. ROSS and family, of Kokomo, have returned home from Winter Haven, Fla., where they spent the winter.

DR. WILLIAM F. CLEVINGER announces removal of offices to 744-747 Newton Claypool Building, Indianapolis.

DR. CHARLES J. STOVER, of Eaton, Ind., and Miss Anna G. Carroll, of Hartford City, Ind., were united in marriage June 24, 1908.

DR. HERMAN BOWLES and Miss Margaret Scott, both of Muncie, were united in marriage June 10. Dr. Bowles is associated with his father in the practice of medicine.

DR. JOHN F. BARNHILL, of Indianapolis, read a paper, by special invitation, before the Section on Laryngology and Rhinology of the New York Academy of Medicine on Saturday, May 23.

CHARLES S. GRIFFIN, son of Dr. L. B. Griffin, of Greenfield, who has been at Asheville, N. C., for the past eight months, for pulmonary tuberculosis, returned home June 2, practically cured.

DR. F. C. MCBRIDE, assistant surgeon, Soldier's Home, has resigned and will practice medicine at his home, Sullivan, Ind. Dr. L. B. Campbell of Birmingham, Mich., will fill his place.

MRS. CHAS. SELLERS, wife of Dr. Chas. Sellers, of Montpelier, Ind., aged 34 years, died at Hope Hospital, Fort Wayne, Monday morning, June 15, from cardiac thrombosis, five days following confinement.

DR. EARLE S. GREEN and Miss Mary Kinert, of Muncie, were united in marriage May 27. Dr. and Mrs. Green left at once for a three weeks' tour of the East. Dr. Green graduated from the Indiana Medical College in the class of 1907, and for the past year has been acting assistant surgeon in the Public Health and Marine-Hospital Service, stationed at Fort Stanton, New Mexico. He will be associated with his father and brother in practice in Muncie in the future.

NEWS, NOTES AND COMMENTS

THE Philadelphia Academy of Surgery offers the Samuel D. Gross prize of \$1,500 for the best original essay, not exceeding 150 pages, octavo, in length, illustrative of some subject in surgical pathology or surgical practice, founded upon original investigations, the candidates for the prize to be American citizens. Essays will be received not later than Jan. 1, 1910. Applicants may secure further information regarding the prize by writing the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 South Thirteenth Street, Philadelphia."

At a meeting of the board of trustees of the Indiana University, held in Bloomington June 23, the following officers and faculty for the school of medicine were selected:

Dr. Allison Maxwell, dean; Dr. Edward F. Hodges, vice-dean; Dr. Edmund D. Clark, secretary; Dr. John S. Barnhill, treasurer, and B. D. Myers, secretary of the medical department. Drs. Henry Jameson, Allison Maxwell and George W. McCaskey, professors of medicine; Drs. Louis Burkhart, Samuel E. Earp, George D. Kahlo, Theodore Potter and Albert C. Kimberlin, clinical professors of medicine; Drs. Francis D. Dorsey and Robert H. Ritter, associate professors of medicine; Dr. Frank B. Wynn, professor of medical diagnosis; Dr. William T. S. Dodds, associate professor of clinical diagnosis; Dr. Simon P. Shearer, professor of gastrointestinal diseases; Dr. L. Park Drayer, professor of pediatrics; Drs. James H. Taylor and John A. Lambert, clinical professors of pediatrics; Dr. Amelia R. Keller and Dr. Oscar N. Torian, associate professors of pediatrics; Drs. Frank F. Hutchins, Ernest C. Reyer and Albert E. Sterne, professors of mental and nervous diseases; Drs. Charles S. Neu and Robert N. Todd, associate professors of nervous and mental diseases; Drs. William H. Foreman and C. Richard Schaefer, professors of therapeutics; Dr. Thomas W. Haas, associate professor of therapeutics; Dr. John N. Hurty, professor of hygiene and sanitary science; Dr. Samuel C. Norris, associate professor of hygiene and sanitary science; Drs. James H. Ford, John H. Oliver and Miles F. Porter, professors of surgery; Drs. Edmund D. Clark, J. Rilus Eastman and George M. Wells, professors of clinical surgery; Drs. Maynard A. Austen and David Ross, associate professors of surgery; Dr. Horace R. Allen, professor of orthopedic surgery; Drs. William N. Wishard and John A. Sutcliffe, professors of genito-urinary surgery; Drs. Frederic R. Charlton and Harvey A. Moore, clinical professors of genito-urinary surgery; Drs. George J. Cook and John C. Sexton, professors of gastrointestinal surgery; Dr. Alois B. Graham and Thomas C. Kennedy, clinical professors of gastrointestinal surgery; Drs. Walter S. Given and Homer H. Wheeler, associate professors of gastrointestinal surgery; Dr. Alembert W. Brayton, professor of dermatology and syphilology; Drs. Albert M. Cole and E. Oscar Lindermuth, professors of electrotherapeutics and dermatology; Drs. Albert E. Bulson, Jr., Thomas C. Hood and Frank A. Morrison, professors of ophthalmology; Drs. Harry C. Parker and Frederick C. Heath, clinical professors of ophthalmology; Drs. John S. Barnhill, Lewis C. Cline, John I. Kyle and Kent K. Wheelock, professors of otology, laryngology and rhinology; Drs. John L. Masters, Lafayette Page and Ernest DeW. Wales, clinical professors of otology, laryn-

gology and rhinology; Dr. Orange G. Pfaff, professor of gynecology; Drs. Thomas E. Eastman, Thomas B. Noble and Hugo Pantzer, clinical professors of gynecology; Drs. Bernays Kennedy and Robert O. McAlexander, associate professors of gynecology; Drs. John T. Davis, Sidney J. Hatfield, David Tahn, Goethe Link and John Pfaff, associate professors of gynecology; Dr. Edward F. Hodges, professor of obstetrics; Dr. Charles E. Ferguson, clinical professor of obstetrics; Dr. Henry F. Beckman, associate professor of obstetrics; Dr. Charles S. Neu, professor of pathology; Dr. John W. Fluss, professor of anatomy; Drs. John Morris, Norman E. Jones, Walter W. Barnert, W. B. Robinson and Charles O. Durham, associate professors of anatomy; Drs. Gustave A. Petersdorf and Charles S. Woods, professors of chemistry, and Dr. William O. Gross, professor of toxicology.

DR. J. N. HURTY, Secretary of the Indiana State Board of Health, in a letter written to Dr. C. Norman Howard, of Warsaw, Secretary of the Kosciusko County Medical Society, makes the following pertinent remarks concerning the warfare against consumption:

"The people do not appreciate, and very likely we of the profession do not fully appreciate, the colossal importance of the combat against 'the great white plague.' It is true that if this arch enemy were defeated the people of Indiana would be saved \$10,000,000 annually. I have submitted this estimate of the annual loss to Indiana by tuberculosis to several bankers and business men, and all have said it is too low. One bank president gave two hours to going over the figures and the basis of figuring, and said he was astounded, and the estimate was below rather than above the truth. He is now warmly interested in the anti-consumption fight and says it is the most important economic question before the people to-day. In this opinion he agrees with the New York Board of Trade, which, after referring the matter to a committee and discussing the subject from all sides, passed the following resolutions covering not only the prevention of consumption, but the general subject of the preservation of the public health:

"WHEREAS, Health is the basis of happiness, wealth and power; therefore, be it

"Resolved, by the New York Board of Trade, That the preservation and promotion of the public health is of paramount importance to the nation, and is of more importance than the building of the Panama Canal, the building of a navy,

the construction of public works, or the promotion of finance or business; and be it further

"Resolved, That this business organization recommends to the people that such legislation be speedily adopted as will lead to the education of the masses in the laws of health and to the practical application of said laws to every-day life."

"The business men of your city would certainly do wisely to follow the lead of the practical and successful New York Board of Trade and heartily endorse the work of disease prevention. You should try to induce the business men of Warsaw to attend your meeting. Of course, only a very few will come. They will say they 'have not time.' This is because they do not understand that they can lower taxes and make money and increase their happiness by fighting such a seemingly intangible evil force as consumption. It is the duty of the medical profession to keep at the business men until they understand this great economic movement, and then keep after them until they act.

"Warsaw should have an anti-tuberculosis society, and its highly economic work of preventing tuberculosis and saving the lives of those stricken with the disease should have liberal private and public support. The city authorities should take hold of the matter and the city board of health should lead.

"The medical profession is the repository of the knowledge that consumption is not hereditary, and that it is always preventable and that it is curable in its early stages. Being such repository, it is the duty of its members to continually cry forth the facts from the housetops until the so-called practical men hear and act. They will be practical when they act and impractical until they do.

"To make plain to the people the awful havoc wrought annually by consumption, permit us to give the following table from the actual records in the office of the State Board of Health for 1907:

"Total consumption deaths, 4,456; males, 1,675; females, 2,771; mothers, age 18 to 40, the prime of life, 927; fathers, age 18 to 40, the prime of life, 255; orphans made under 12 years of age, 2,553; homes invaded, 3,483; actual cost to the people, \$10,000,000.

"That the fight against tuberculosis is an economic proposition appears when we know and understand that this awful loss of life and money can be saved. When will the saving begin?"

SOCIETY PROCEEDINGS

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of June 9, 1908.)

Society met in regular session in the Assembly room with twenty-six members present. Minutes of previous meeting read and approved.

The first paper of the evening was by Dr. Chas. G. Beall, on "The Physiology of Respiration." His talk was illustrated with charts and apparatus.

Reports from the meeting of the A. M. A. were heard as follows: Dr. L. P. Drayer, pediatrics; Dr. Albert E. Bulson, Jr., ophthalmology; Dr. B. Van Sweringen, surgery; Dr. G. Van Sweringen, dermatology and genitourinary surgery; Dr. C. E. Barnett, American Urologic Association; Dr. C. H. English, obstetrics and diseases of women; and Dr. B. W. Rhamy, pathology.

Motion made and carried that the matter of resolutions concerning discontinuing postgraduate program after June 30, 1908, be taken up. Motion made by Dr. Drayer and carried, that the resolutions be adopted.

Motion made and carried that a committee be appointed to arrange for the meeting of June 30th. The chair appointed Drs. Beall, G. Van Sweringen and Kane.

Dr. Buchman brought up a question concerning the serving of an injunction on the Board of Health to stop it from enforcing the milk ordinance. Dr. Bulson made a motion that it is the sense of the Fort Wayne Medical Society that the Board of Health is pursuing the proper course in enforcing the milk ordinance and that this society pledges itself to furnish all the support possible. Motion seconded. The motion was amended that the publication committee acquaint the papers with the facts for publication. Motion as amended carried.

Dr. Bulson moved that the society instruct their delegate to vote for a resolution to have the state society meet in the fall. Motion seconded and carried.

Adjourned.

J. C. WALLACE, Sec.

(Meeting of June 16, 1908.)

Society met in regular session in the Assembly room with sixteen members present. Meeting called to order by President W. D. Calvin. Minutes of previous meeting read and approved.

Round Celled Sarcoma.—Clinical case report by Dr. M. F. Porter. Case was supposed to be one of floating cartilage of the knee following injury. The patient was operated and the growth removed; and instead of white cartilage was found a bluish mass having a pedicle. Microscopical examination proved the growth to be a round-celled sarcoma. A radical operation was necessary.

Cancer of the Lip.—The technic of the operation was given by Dr. Porter.

Dr. Wheelock reported three cases of headache relieved by tonsillotomy.

Dr. W. D. Calvin reported a case of typhoid fever with purpura hemorrhagica.

In discussing this case, Dr. Porter gave the therapy of purpura.

Bronchitis, Chronic, Pathology and Symptoms, was the title of a paper by Dr. W. W. Carey.

In opening the discussion Dr. Niernan said that the author ought to have emphasized home treatment.

Dr. Rhamy, in discussing the subject of sputum, said that one form of the sputum showed an abundance of eosinophiles. In another form the sputum has the appearance of coagulated milk; microscope shows fibrin and fat globules, but no leucocytes.

Dr. G. Van Sweringen called attention to the frequent exacerbations in chronic bronchitis. The Diazo reaction never occurs in acute bronchitis.

The discussion was closed by Dr. Carey.

Drs. Henderson and Moser were elected to membership in the society.

Dr. Porter made a motion that a committee be appointed to draft resolutions and procure flowers for Mrs. Dr. Charles Sellers. Motion carried and the chair appointed Drs. Porter, Wheelock and Beall.

Dr. C. H. English presented the following resolutions concerning Fourth of July celebrations, and motion was made and carried that they be adopted:

Resolved, That the Fort Wayne Medical Society extends its thanks and appreciation to Martin H. Ankenbruck, chief of police, for the order forbidding the shooting of firecrackers before the Fourth of July, and that in so doing he not only conserves the comforts of the sick and suffering, but also the safety of the general public. And, be it further

Resolved, That owing to the great danger of tetanus or lockjaw resulting from wounds inflicted by the blank cartridge and giant firecracker, that every means possible be employed to prevent their use on the Fourth of July.

Adjourned.

J. C. WALLACE, Sec.

ADAMS COUNTY.

The Adams County Medical Society met in regular session June 19. Minutes of the last two meetings read and approved. The paper of the evening was by Dr. McMillen, on "Diseases of the Abdomen," in which the essayist said that the diseases of the abdominal cavity cover a wide field—entirely too wide for the scope of a single paper. He said that the diseases of the abdominal cavity are far reaching in their effects. The author referred to the recent theory that tuberculosis is never a primary disease of the lungs but that the bacilli first enter the alimentary tract and finally reach the lungs through the blood. The author also discussed the subject, "Acute Catarrhal Gastritis," saying that it may occur at all ages, and is commonly due to the irritative effects of indigestible food, or food in a state of incipient decay or fermentation. Overloading the stomach with wholesome food may also be a cause. The symptoms produced by the different causes were clearly stated. As treatment, he said the bowels should be unloaded, and the system flushed with good, pure drinking water. A diet of milk, buttermilk, starches and cereals should then be inaugurated, and sane and simple ways of living insisted upon.

In the discussion Dr. Beavers said that he would give intestinal antiseptics after eliminants, and then follow with tonics.

Dr. Costello said that too many cases are treated for typhoid which are auto-infection cases. He said that the system should first be cleansed thoroughly and then antiseptics given, such as calomel, the sulphocarbolates, and the salicylate and arsenate of soda.

Dr. Boyers said he thought too much emphasis is placed on intestinal antiseptics. He thinks elimination is sufficient.

Dr. Beavers uses "iodalbin" and thinks he has an ideal antiseptic, especially in old cases.

After this meeting the Adams County Medical Society takes a vacation until the second Friday in October, when the following papers will be presented: "Fetal Circulation," by Dr. D. D. Clark, and "Chemical Incompatibilities in Ordinary Prescription Work," by Dr. J. M. Miller.

Adjourned.

MARIE L. HOLLOWAY, *Sec.*

CLAY COUNTY.

The Clay County Medical Society met at Bowling Green, July 19. The papers were by Dr. Cook of Bowling Green, on "The Heart in Tuberculosis;" Dr. Dilly of Brazil, on "Detection of Tuberculosis in Dairy Cattle," and Dr. Finley of Bazil, on "Gastroenteritis."

Adjourned.

G. W. FINLEY, *Sec.*

DELAWARE COUNTY.

The regular meeting of the Delaware County Medical Society was held June 12, the date of meeting being postponed one week to allow members so desiring to attend the meeting of the A. M. A. Members present, twenty-four.

The attention of the society was called to the death of Dr. Homer M. Shaw of Gaston, Ind., and the following resolution was passed:

WHEREAS, It has fallen to us to lose one of our number, Dr. Homer M. Shaw, by the hand of death; be it

Resolved, That while we bow in humble submission to the divine will, we deeply deplore our loss, and desire to extend to the bereaved family our sympathy in their time of trouble; and that a copy of these resolutions be forwarded under the seal of this society to the sorrowing wife and father of the deceased.

The board of censors reported favorably upon the following applicants, and they were unanimously elected to membership in the society: Drs. Earle S. Green, Noah D. Berry, both of Muncie, and U. G. Powers, Albany.

Mr. L. D. Clark, president of the Delaware County Hospital Association, appeared before the society in the interest of the hospital association, forcibly presenting the need of a county hospital, and the reasons why same should be secured, and appealing to the medical society to lend their aid and influence in assisting the association to secure same.

Dr. A. H. Good read the first paper of the afternoon on "Puerperal Peritonitis," in which he particularly emphasized the value of serum therapy. The paper elicited an excellent and general discussion by the members, Dr. O. W. Owens leading. Particular mention was made of the danger of sepsis from the parturient woman examining herself prior to delivery. Protest was made against the tendency to handle peritonitis, septicemia, etc., differently when they appear during the puerperium, and an appeal was made to treat the patient rather than the disease. Stress was laid upon the extreme necessity of prophylaxis.

Adjourned.

H. S. BOWLES, *Sec.*

ELKHART COUNTY.

The Elkhart County Medical Society met in the office of Dr. I. J. Becknell, Goshen, May 28. The minutes of the previous meeting were read and approved. There were 26 in attendance. So many of the members

desired to attend the American Medical Association meeting in Chicago that the meeting was held one week earlier than the regular time.

Distortion of the Foot, with Paralysis of the Affected Part. Clinical case report and patient exhibited by Dr. I. J. Becknell. Patient, male, with good history, aged 30. He was in splendid condition with the exception of the left leg and foot. He had the whooping cough when but two years of age, and soon after his foot began to bother him. He has a distortion of the foot, almost the opposite of talipes; there being paralysis of the affected region. The case was discussed by various members of the society. The majority seemed to think that a tenotomy of the tendon of Achilles and treatment with electricity and massage would be of much benefit to the case.

Puerperal Albuminuria was the title of a paper by Dr. I. J. Becknell, in which he said that this disease was little known to medical science a little more than a half a century ago, but it is now conceded to be one of the most frequent of all the puerperal diseases. Albuminuria is no longer believed to be a symptom of Bright's disease only. In fact, nine cases out of ten do not show the structural lesions of the kidneys, such as are found in Bright's disease. Albuminuria and uremia are not identical terms, the one may exist and the other be absent. It is now fully conceded by all advanced men that albuminuria has an immediate bearing on a great variety of pathological conditions other than convulsions; that it often exists in its fullest development without causing convulsions; that dangerous and even fatal convulsions may occur when albuminuria is wholly absent, and still further that the nervous perturbations which cause the convulsions may also be the cause of albuminuria. The albumen of Bright's disease differs essentially from that occurring in the temporary albuminuria of pregnancy, as can easily be shown by its chemical reaction. The causes of puerperal albuminuria are not yet fully understood, though it is an accepted fact that, in a large number of cases, gestation develops a temporary albuminuria which may disappear during or soon after puerperal convalescence. It has been fully demonstrated that convulsions, the various phlegmasiæ incident to the puerperal condition, the pyæmic diathesis, septic absorption, and puerperal fever, or any of these causes, may develop albuminuria. Albumen in the urine is not the disease, but it is the aggregation of symptoms, if which this is one, that constitutes the disease we call albuminuria. The most frequent of the nervous symptoms is headache, and this is very significant, especially when associated with insomnia, impaired vision, and nervous irritability.

Glycosuria was the title of a paper presented by Dr. W. A. Stauffer. He divided his subject into three divisions, namely: "Physiological glycosuria, pathological glycosuria, and alimentary or induced glycosuria."

In opening the discussion Dr. I. W. Short said that he has had a number of cases that had no special symptoms, and yet the albumen was often more than 25 per cent. He reported one case that had no albumen in the urine up to the fifth month when she aborted in convulsions. With the catheter he obtained a little urine that was 50 per cent. albumen. She made a good recovery, but had albumen in the urine for two months.

Dr. Samuel Wagner says that the examination of the urine is not always reliable. In some cases with the ordinary symptoms of edema, frontal headaches, nausea and vomiting, where one expects to find albumen, none can be found. But in this class of cases there has always been an unusual amount of urea. He reported one case where he suspected albumen, that miscarried at five months. The urine cleared up soon after and she has had no trouble since.

Dr. J. A. Work, Sen., said that the subject of albuminuria of pregnancy is very important and should be understood by every physician. He said: "I always make it a rule to examine the urine every two weeks, and many times oftener if I suspect any serious trouble. I realize that we can not be so careful in all of our cases, because some do not engage a physician until the time of confinement. I have found that as the symptoms grow worse the albumen increases in the urine. As to the treatment much can be done with the proper diet and elimination. I remember one case of mine which was relieved with careful living, good elimination and as a tonic I gave her nothing but iron and strychnin."

Dr. James Mathews said that "the great majority of these cases that I see have convulsions when I am called. Situated in the country as I am, we can not do as our city brethren. We are often obliged to resort to means and methods that tax our ingenuity."

Dr. M. K. Kreider said: "I was very much interested in both papers. I well remember one case of mine that had no trouble during the gestation or during labor, but afterward she had sugar in the urine that worried me somewhat. After a careful examination of the urine I found that it was a case of lactosuria instead of glycosuria."

Dr. W. B. Kreider said: "The oculist is interested in these cases, especially in glycosuria. The rapidly developed cataracts that are frequently seen in connection with sugar in the urine are not hopeless cases. Many of these cases can be relieved and good vision restored. Cases of albuminuric retinitis are sometimes recognized when there is no albumen in the urine."

Dr. H. K. Lemon said that as to the pathology in glycosuria, lesions are found in the liver. The essayist also spoke of the involvement of the pancreas and that the prognosis was bad. He did not mention that if the tail of the pancreas was involved, as it often is, the condition was unfavorable.

Dr. I. J. Becknell reported a case, primipara, seven months gestation, pulse 120, edema upper and lower extremities, labia swollen in extremis, tongue swollen, headaches, nausea, vomiting, urine scanty. She had retinitis for two months. The case aborted and the urine increased soon after. She recovered entirely from her retinitis but not for a number of months. It is a question, still disputed, as to whether an abortion should be produced in these cases. There is argument on both sides and many able men oppose it.

Dr. George W. Spohn said: "I agree with Dr. W. B. Kreider that more emphasis should be put upon these cases. It is a fact that cases of albuminuria were not diagnosed until the ophthalmologist recognized the retinitis in the dark room. When a pregnant woman complains of failing vision it should arouse the suspicion of the attending physician. The retinitis in these cases comes on slowly and generally does much mischief in a short time. A number of

cases have been reported who have recovered their normal vision, but such is not the rule. The prognosis as to vision is always bad. The prognosis in retinitis depends upon the period of gestation. If it comes on at labor or a few weeks previous, the prognosis is good, but if it comes on before the fifth month the chances for vision are bad. I can not agree with Dr. Becknell, unless it be near the end of gestation, an abortion should be produced, and delivery should be as early as possible.

The applications for membership of Drs. C. A. Inks and F. H. Ferguson, of Nappanee, were received.

Dr. J. C. Bateson, of Scranton, Pa., one of the A. M. A. organizers, being present, was asked to give a short talk. He spoke of the advantages of organization. He said that the better organized the medical society is the better work it is doing. The greatest discord in the profession exists in those counties where there is no organization. They never learn to know each other. An organized society cultivates fraternalism, and physicians become scientific in their work, more thorough in every way, and they do better work for their patients and hence can ask more money for their services. It has been proven that the union of the various medical schools has been a great benefit to the profession. The profession should get closer to the people. He suggests that a society have one or two open meetings each year. In these special meetings invite people of all classes to meet with you and discuss such subjects as will interest all. When the public once learn to know the profession they will have more confidence in physicians. The public generally has a wrong impression of physicians. This can be overcome by mingling with each other and by education.

Many questions were asked the speaker, such as the standard of medical schools, legislation, pharmacy board, public health and the clinic material of some of our medical schools. The doctor conceded that the private physician has a just grievance in the way many of our medical schools accept clinical material from many people that are perfectly able to pay for services. In fact, some schools advertise that if patients pay the hospital expense the medical services will be free. This takes from every city a goodly number of patients each year, who are able to pay good fees to their home physicians. It is an injustice to the private physician. Such a medical school should be boycotted by the profession. If the county societies would take up this question it would be handled soon. It will be only a short time until a movement will be in motion that will stop the evil or some of the schools will lose numerically by their practices.

Adjourned.

GEORGE W. SPOHN, Sec.

FRANKLIN COUNTY.

The Franklin County Medical Society met in regular session June 1, at Brookville, with an attendance of two-thirds of the membership. Dr. S. A. Gifford, of Laurel, read a very interesting paper on "Chronic Rhinitis, Its Complications and Treatment, from the Standpoint of the General Practitioner." Dr. J. C. Clawson, of Cedar Grove, also read a paper on "Exophthalmic Goitre," treating the subject in a very clear and concise manner. Discussions of both papers were entered into by all present, and some very interesting and instructive experiences were presented.

The application of Dr. John W. Lucas, of Mt. Carmel, was presented for membership and he was unanimously elected. The question as to the proper procedure in regard to the case of the fake "cancer cure" man, residing near New Point, Ind., after considerable discussion, was tabled until the next meeting.

Adjourned.

C. H. MAYFIELD, *Sec.*

GRANT COUNTY.

The regular meeting of the Grant County Medical Society was held July 28. Dr. E. O. Harrold read a paper on "The Prevention of Tuberculosis," and Dr. G. G. Richardson on "The Treatment of Tuberculosis."

The election of officers for the new year resulted as follows: President, G. R. Daniels; vice-president, E. O. Harrold; secretary, O. W. McQuown; treasurer, M. T. Shively; censor, Glen Henley; delegate, J. A. Mattison.

Adjourned.

O. W. McQuown, *Sec.*

The Grant County Medical Society met Tuesday evening, June 23. The first paper of the evening was by Dr. Glen Henley, on the subject of "The Doctor and His Records." The second paper was by Dr. Mattison, on "The Early Diagnosis of Pulmonary Tuberculosis."

Dr. Holliday presented a case of supposed colic, which was due to the appendix.

Dr. Harrold presented a case of Charcot's knee.

Cretinism. Case report and patient exhibited by Dr. Loomis. The family history is negative, except a scare by the mother in pregnancy, and its paternal grandmother, having had a goiter from the age of 10 to about 16 years of age, at which time it entirely disappeared and has not returned. When the patient was first seen three weeks previous to this date, it was a typical cretin; viz., a thick, short neck, large face, thick lips, short arms and legs, thick stubby hands and fingers, mouth open, tongue protruded, apathetic, would lie indefinitely in any position, non-expressive eye, mental impairment marked, large abdomen, skin hard and apparently swollen, but not pitting on pressure. Patient was placed on thyroid extract one and one-third grains three times daily, and within three weeks it presents a very different picture, with all the symptoms very much improved; in fact it would not be recognized as being the same child. It has lost several pounds in weight, skin has changed, and the mental condition is improved.

There seems to be an entire absence of the thyroid gland in this case. The important criteria in making a diagnosis in a cretin, are the physiognomy, shape of face and head, stunted growth, especially of the long bones, and the condition of the connective tissue.

Adjourned.

O. W. McQuown, *Sec.*

GREENE COUNTY.

The Green County Medical Society met at Switz City, June 11, with twelve members present. The paper of the evening was by Dr. L. A. Hyde, on the subject of "Chorea, Associated with Endocarditis and Nephritis," report and presentation of case. Patient, child 9 years of age, had typhoid fever four years ago, uncomplicated as far as observed. Had neurotic

heredity. All symptoms improved on exhibition of salicylates, but no history of rheumatism.

An amendment to the by-laws, making a violation of any resolution of the society punishable by reprimand, suspension or expulsion, was finally adopted unanimously.

Drs. J. M. Harrah and L. A. Hyde will present the subject of "Chorea" at the August meeting.

Adjourned.

F. A. VAN SANDT, *Sec.*

HANCOCK COUNTY.

The Hancock County Medical Society held its regular monthly meeting May 7, 1908, in the small courtroom, Greenfield. Meeting called to order by President Barnes. Minutes of previous meeting read and approved. The Board of Censors reported favorably on the applications of Drs. Benjamin, Cook, Larrabee, McCord, Fisher, Hervey, Johnston and Collins. Motion made and carried that the report of the Board be accepted.

The program of the evening consisted in case reports by Drs. Bruner, Barnes and Trees. Dr. Bruner is having fine success with trypsin in cancer of the breast. These cases were all freely discussed.

Adjourned.

EARL R. GIBBS, *Sec.*

The regular monthly meeting of the Hancock County Medical Society was held at Greenfield, Ind., Thursday, July 2. Meeting called to order by Vice-President Dr. C. K. Bruner. Dr. E. F. Sommers was elected to membership.

The first paper was by Dr. Joseph L. Allen of Charlottesville, on "Symptoms and Treatment of Typhoid Fever," in which he said that the symptoms are manifest during the period of incubation, which is usually given as from one to two weeks. A sense of weariness and fatigue on exertion is one of the common forms of onset. Peculiar, characteristic rose-colored spots make their appearance about the seventh day of the disease, and their appearance is usually regarded as pathognomonic. The spleen is almost always enlarged and can usually be palpated. A slight bronchial cough may be noted. A very wide variety of symptoms present themselves in this fever. The disease rarely begins with a chill, but it may occur in consequence of hemorrhage of the bowels or nose, or perforation of the bowels. The tongue is at first furred with a heavy white coat and, as the disease advances, tends to become dry and brown, clearing at the edges and tip as the case improves. While diarrhea is the most common bowel disturbance, constipation often proves even more troublesome. Perforation of the bowel may occur and is attended by sudden acute pain in the abdomen and symptoms of collapse. The urine is always of a high color and high specific gravity and may contain albumin. For treatment the author presented the following outline: (1) Rest and diet; (2) The Brand or bath treatment; (3) The expectant symptomatic treatment; (4) The antiseptic treatment; (5) The eliminative and antiseptic treatment, and (6) The serum treatment. In closing the author gave case reports of several cases of typhoid fever which had been treated by him.

The second paper was by Dr. Griffin. Both papers were freely discussed by the members present.

Adjourned.

EARL R. GIBBS, *Sec.*

JEFFERSON COUNTY.

The Jefferson County Medical Society met in regular session June 17, with nine members present. The subject for discussion was "Nephritis." The discussion was opened by Dr. J. H. Calvert, who said that in treatment the first thing to be done was to give a thorough purge of calomel and jalap, to be followed by a warm infusion of digitalis. If the skin is dry, give a warm saline bath, and if necessary give small doses of pilocarpin.

Dr. Christie said that in addition to the above he received good results from nitroglycerin.

Dr. Cooperider said he had obtained good results from tea of water melon seed, with true sweet spirits of niter.

Dr. George E. Denny advised leaving off all food except milk, and give high saline injections with nitrate of soda as a diuretic.

In closing the discussion Dr. Copeland said that he thinks diuretics are of little value in this connection.

Adjourned.

J. COOPERIDER, *Sec.*

KOSCIUSKO COUNTY.

The Kosciusko County Medical Society held its July meeting on the 7th of the month.

Dr. T. J. Shackelford, Warsaw, read the first paper of the afternoon, entitled "Pathology, Prognosis and Treatment of Pulmonary Tuberculosis."

In the discussion which followed Dr. M. G. Yocum, Mentone, spoke for the protection of other members of a family in which one or more were afflicted with tuberculosis.

Dr. Frank R. Foster, Warsaw, said that patients are apt to be shallow breathers. He spoke of the value of deep breathing, and demonstrated how full inspiration and expiration could be most thoroughly accomplished.

Dr. W. S. Leiter, Claypool, spoke of the necessity of disinfecting, renovating and admitting fresh air and sunlight into homes where tuberculosis has existed.

Dr. C. E. Thomas, Leesburg, said that, even if it does scare them at the time, patients were better off in the long run if they are told they had tuberculosis as soon as the diagnosis was made.

Dr. Forrest J. Young, Leesburg, spoke of the x-ray as being of value in helping to make the diagnosis of pulmonary tuberculosis.

Dr. C. C. DuBois, Warsaw, presented a specimen of tubercular sputum, having brought a microscope to the meeting so that it might be examined. There were an enormous number of tubercle bacilli, being practically a pure culture. They covered a large part of the glass slide.

Dr. L. W. Ford, Syracuse, said that there should be a law permitting the health officer to look after families in which there is consumption, and see that they live in a proper manner.

Dr. A. C. McDonald, Warsaw, spoke of the value of early diagnosis before the tubercle bacilli are found in

the sputum, laying special stress on dulness at the apex of the lungs as an early objective symptom.

"Tuberculosis of Bone" was the subject of the next paper, read by Dr. J. M. Bash, Warsaw.

In the discussion which followed Dr. C. W. Burket, Warsaw, stated that when the disease had not progressed to the extent of suppuration and the joint was simply enlarged, he had seen very good results from the injection of iodoform emulsion.

Dr. Forrest J. Young said he believed in the immobilization of the joint and then letting the patient get out of doors into the fresh air. He spoke of the value of the bed-board on which a patient could be put out under a tree. He said that when cavities form they should be opened and curetted, then swabbed out with a solution of zinc sulphate and packed with either iodoform gauze or plain gauze. This gives a nice, clean, granulating surface which heals quickly. The joint should be put in the position in which it will be most useful if ankylosis occurs.

Dr. N. Austin Cary, Silver Lake, spoke of the value of the bed-board in tuberculosis of the lower cervical, dorsal and lumbar vertebrae. Dr. Cary also spoke of a patient under his care at the present time suffering from tuberculosis of bladder, ureters and kidneys, who was doing well under tuberculin therapy.

Dr. A. C. Dubois said that if the part is in poor position through muscular contraction the joint should first be immobilized with a view to lessening the strain on these muscles. After that had been accomplished the joint could then be put into the best position for future use.

Dr. C. N. Howard, Warsaw, spoke of the diagnostic value of the night cry of the little patients with beginning tubercular hip disease. The muscles around the joint relax after their day of tension.

Dr. P. G. Fermier, Leesburg, read the next paper, entitled "Tuberculosis of the Digestive System."

In the discussion which followed Dr. G. W. Anglin, Warsaw, spoke of the cases of chronic diarrhea which go on for years, the patient passing into a low condition before the diagnosis of tuberculosis is made.

Dr. Thomas said that there was at least palliative treatment for sufferers from tuberculosis of the digestive system whose prognosis was bad. We can treat the symptoms of pain, diarrhea and tympanites.

Dr. Leiter said that Professor Martin of Germany had found in operating upon those suffering from tubercular peritonitis that the opening of the abdomen and admitting air had improved the patient. Dr. Leiter spoke of a patient of his suffering from tubercular peritonitis who had been operated upon some weeks ago. There had been particular attention paid to sunlight and fresh air since the operation. The patient is getting better.

A letter on the subject of tuberculosis from Dr. J. N. Hurty, Secretary of the State Board of Health, was read before the society. Dr. Hurty had kindly prepared the letter for this meeting.

Adjourned to meet at 1 p. m., Tuesday, August 18.

C. NORMAN HOWARD, *Sec.*

LAWRENCE COUNTY.

The Lawrence County Medical Society met in regular session July 2 in Bedford. In the absence of both the president and vice-president, Dr. Andrews occupied the chair, by consent of the members.

"Cholera Infantum." Case reports and paper presented by Dr. McFarland. He said that the disease should be treated promptly; the stomach emptied and the bowels washed out. Do not wait for the action of cathartics. Bathe, use ice by mouth, and morphin and atropin hypodermically.

"My Experience in London Clinics" was the title of a very instructive paper by Dr. Perkins.

"Iritis." Dr. Emery read a paper on this subject, in which he emphasized the importance of early diagnosis and treatment. He said that early recognition and proper treatment may save time and prevent suffering and often loss of vision. The tension of the eyeball should be tested in patients over 30 years of age, if not in every case, before using a mydriatic, as care must be taken not to confound iritis with acute glaucoma. Reports of a number of cases showed that early diagnosis with prompt appropriate treatment gives uniformly good results.

Dr. Freeland reported a case of double ovariectomy, showing multiple cysts of both ovaries.

Drs. W. H. Smith and E. E. Mitchell were appointed as a committee to arrange a program for the remainder of the year.

Adjourned.

CLAUDE DOLLENS, *Sec.*

LA PORTE COUNTY.

The Laporte County Medical Society met in regular session June 12, at Laporte. The first paper on the program was by Dr. B. C. Howell, on the subject, "The Milk Supply of Cities," which was full of valuable ideas. The paper was referred to the committee on publication, after being discussed by almost all the members present. Dr. J. W. Milligan, secretary of the society, presented a paper on "The State Control of Tuberculosis."

The next meeting of the society will be held in Michigan City, Aug. 14.

Adjourned.

J. W. MILLIGAN, *Sec.*

MADISON COUNTY.

The Madison County Medical Society met Thursday, May 26, at the county infirmary, with 72 members and guests present, including the wives of the members.

"Cretinism." Case report and patient exhibited by Dr. Etta Charles. Patient, female, 14 years of age, which had been exhibited before the society at the November meeting, 1907, at which time a very careful examination was made by all the members of the society. The child has been treated since with thyroid tablets $2\frac{1}{2}$ grains three times a day, and the improvement is very marked. Pictures of the condition were taken at the November and May meetings.

"Trophic Joint Disease," paper and clinic by Dr. M. A. Austin.

"Locomotor Ataxia." Case report and patient exhibited by Dr. Benjamin H. Perse. He has been in the practice of medicine over forty years, and yet is modern in his diagnosis and treatment of this disease.

"Fractures of the Hip Joint," was the title of a lecture by Dr. Thomas M. Jones with exhibition of patient. Patient, aged lady with impacted fracture of one year's standing. She now walks, but with much shortened limb. In his lecture he laid great emphasis on the point that in the aged great care should be

exercised in not breaking up an impacted fracture in an effort to make sure of the diagnosis.

President appointed two delegates to attend the National Congress on Tuberculosis, to meet at Washington, D. C.

At the close of the meeting refreshments were served by Mrs. Heagy, Assistant Superintendent.

Adjourned.

BENJ. H. COOK, *Sec.*

PUTNAM COUNTY.

The Putnam County Medical Society met April 30, in the office of Dr. Charles Sudranski, Greencastle. The principal speakers of the evening were Drs. Kimberlin, McDonald and Brayton of Indianapolis.

Dr. A. C. Kimberlin presented a very interesting paper, in which he brought out many new points in the diagnosis of "Pleuritic Effusions," urging examination and early diagnosis, and the institution of a proper course of treatment.

Dr. J. C. McDonald discussed the subject of "Rheumatism," while Dr. A. W. Brayton delivered a most interesting heart to heart talk to the elder as well as the younger members of the profession. Besides the above named doctors, the following were also guests of the evening: Drs. Williams, Hunt and Hope, of Coatsville; Collins, of Rochdale; Mercer, of Reelsville, and O'Brien, of Fillmore.

At the conclusion of the meeting the doctors repaired to the dining room of the Palace restaurant, where a feast was spread, to which one and all did justice.

Adjourned.

J. V. BASTIN, *Sec.*

The Society again met May 4 with Dr. Eugene Hawkins, who, with Dr. Jerome King, were elected delegates to the State meeting to be held at French Lick June 18 and 19.

The papers of the evening were by Dr. McGaughey on "Anatomy of the Bones;" Dr. J. M. King on "Necrosis of the Bones;" Dr. J. V. Bastin on "Osseous Tuberculosis," and Mr. Charles Webb, representing the A. M. A., made a brief address.

Adjourned.

J. V. BASTIN, *Sec.*

Society met May 21 at the office of Dr. W. W. Tucker. Drs. E. Hawkins and C. T. Zaring discussed the subject of "Fractures in General;" Dr. W. W. Tucker, "Fractures at the Neck of the Femur and Pott's Fracture," and Dr. J. L. Preston devoted his time to the proper reduction and treatment of "Colles' Fracture."

Adjourned.

J. V. BASTIN, *Sec.*

SPENCER COUNTY.

The Spencer County Medical Society met in regular session with Dr. H. G. Weiss, June 16. Meeting was called to order at 3 p. m., with Vice-President Dr. A. P. Gwaltney in the chair. Minutes of April meeting read and approved.

The paper of the evening was by Dr. H. G. Weiss, on "Precautions Against Ophthalmia Neonatorum," and showed careful preparation. He said that infection came on within three days after birth, and that the condition of the towels and hands was largely responsible for infection. As treatment he prescribed a 1 per cent. solution of silver nitrate, chlorid of mer-

cury 1/4,000, a 2 per cent. solution of boracic acid, tannin solution, and hot applications.

A case of eclampsia was reported by Dr. G. B. DeTar, of Lade P. O., three weeks before confinement. Treatment prescribed was chloroform and veratrum viride to control spasm. Prognosis good.

Adjourned.

H. Q. WHITE, Sec.

The Spencer County Medical Society met at Richland, July 21.

The first paper was by Dr. DeTar on "Acute Summer Diseases of Children." In his paper he discussed the following: Acute intestinal indigestion, acute gastro-enteritis, cholera infantum, and ileocolitis. He said that the majority were caused by over-feeding. As treatment he prescribed listerine, opium, capsicum, bismuth, castor oil, and flushing the colon.

"Infant Feeding" was the title of a paper by Dr. S. C. Long, in which he said that the first essential was cleanliness of the nipple and bottles. The mother's milk is always considered best. In the discussion cow's milk was recommended above artificial food.

Dr. J. C. Jolly of Lade was reinstated to membership and the applications of Drs. J. C. Glockman of Hatfield and J. R. Long of Rockport received and referred to the board of censors.

The society will meet in joint session with the Warwick County Society in August.

Adjourned.

H. Q. WHITE, Sec.

VIGO COUNTY.

The Vigo County Medical Society met in regular session May 5, 1908. Dr. Louks lectured on "Embryology," and Dr. Knowlton on "Multiple Pregnancy and Antenatal Pathology." The doctor showed with the lantern sections of the ovaries of cats; in one showing five ovules in a single Graafian follicle—corpus luteum of pregnancy, sections showing the development of the chick from one to five days, and a series of colored drawings from Edgar's Obstetrics on the different arrangements of fetal structures in superfetation. He exhibited fetuses of all ages, one of mummification of the fetus.

Dr. E. D. Thixton was received to membership by letter from the Sullivan County Medical Society.

The following amendments to the Constitution and By-Laws, having been previously submitted in writing, were voted upon and accepted unanimously: (1) Omit reference to exclusive systems of medicine, making every legally registered physician in the county eligible to membership. (2) Raise the dues from \$2 to \$5. Secretary was ordered to have 200 copies of the revised Constitution and By-Laws printed.

Adjourned.

CHARLES N. COOMBS, Sec.

Society met again in regular session May 26, 1908. State Food Inspector Owens gave an interesting talk on milk inspection and the tuberculin test. A resolution was adopted by the society recommending that the city council pass the proposed ordinance requiring dairy products sold in Terre Haute to come from tuberculin tested cattle. Motion made and carried that the president appoint a committee to arrange for a public meeting to be addressed by Mr. Owens and Dr. Hurty, for the purpose of making a tuberculosis exhibit.

The Board of Censors reported favorably upon the applications of Drs. A. T. Payne and H. H. Thompson of Terre Haute; Harry H. Ward and A. D. Ashbury of Coalmont; J. R. Wilson and W. F. Payne of Prairie Creek, and C. B. Collins of Clay City, and on the ballot they were elected to membership.

Adjourned.

CHARLES N. COOMBS, Sec.

WABASH COUNTY.

The Wabash County Medical Society met May 27, in regular session at Memorial Hall. Dr. Charles E. Barnett of Fort Wayne, read a very instructive paper on "Cystoscopy," illustrated by original drawings and followed by a clinical demonstration.

Four new members were voted in at this meeting, being Drs. George D. Balsbaugh, North Manchester; George L. Shoemaker, North Manchester; John B. Shipley, Laketon, and Anna Wilson, Wabash.

Adjourned.

L. E. JEWETT, Sec.

THIRD COUNCILOR DISTRICT MEDICAL SOCIETY.

The sixth semi-annual meeting of the Third Councilor District Medical Society was held at the Elks' Home, Jeffersonville, April 30. Society was called to order by President Cook of New Albany, with 75 members and guests present. The following officers were elected for the ensuing year: President, Dr. W. L. McClain, Scottsburg; secretary, Dr. David Cohen, Jeffersonville. The address of welcome was delivered by Dr. H. C. Sharp, Jeffersonville.

Dr. W. J. Leach, councilor of the Third District, read a paper on "The Tonsil and Its Treatment." No healthy tonsil should be removed. No chronically diseased tonsil nor one which is frequently acutely inflamed should be retained within the throat. The pathology, clinical history, and condition must dictate the course in each case. No function of the tonsil has been proven beyond reasonable doubt. The histologic structure suggests an internal secretion. The picket guard theory is most prevalent. No ill effects are manifested from removing even the healthy tonsil. Pathologic tonsils are responsible for many cases of middle ear diseases and deafness, by interference with drainage and ventilation of the tympanum. Pathologic tonsils are always characterized by low resistance for such infections as tuberculosis, diphtheria, la grippe, scarlet fever, streptococcic and pyogenic bacteria, and probably rheumatism. Peritonsillar inflammation, the so-called quinsy, is usually the result of an infected tonsil or a fragment of one. The mushy, cramped voice is often caused by hypertrophy of the tonsils. Caseous contents of the crypts are extremely potent in the cause of indigestion and fetid breath of some patients. For treatment he recommended, in non-operative cases, to empty and cleanse the digestive tract, and then give sodium salicylate and aconite internally, using Loeffler's solution locally, preceded by an abundance of hot alkaline washes. Always empty the crypts. For surgical treatment he recommended not to remove an acutely inflamed tonsil, but await the interval. The methods of removal and instruments to be used depends upon the size, shape and surrounding structures of the tonsil, as well as the age and controllability of the patient. In all cases of submerged tonsils the tonsillotome is a failure. Tonsillectomy upon all patients over sixteen years of age is best done under local anesthesia and the methods

according to their order of choice would be Robertson's seissors, electric cautery, and cold snare. Cautery operation is aseptic and bloodless, which is quite advantageous for patients advanced in years, as age is conducive to hemorrhage. With the seissors, the capsular cleavage is easier sought out and followed, which is necessary to perfect removal of the whole tonsil. The partial removal of the tonsil is a surgical failure.

The paper was discussed by Drs. Emery, Sharp, Duncan, Flynn, Wilcox, Shelby, Samuels and Starr.

Dr. Wayne Crum, of Sellersburg, read a paper on "Neuralgia," which was discussed by Drs. Ruddell, McClain, Duncan, Graham and Samuels.

Dr. J. H. Walker, of Henryville, presented a paper on the subject, "Chronic Bright's Disease." This paper was discussed by Drs. Peyton, Ruddell, Leach, Crum, McClain and Samuels.

"Autotoxemia in Ileocolitis in Children" was the title of a paper by Dr. J. B. Duncan, of Bedford, in which he said that successful management requires constant endeavors to prevent decomposition of foods and to minimize the amount of autotoxigenic products absorbed. Prepared foods are always a disappointment. The use of intestinal antiseptics is correct in theory but immeasurably disappointing in practice, as it is impossible to prevent by their use the absorption of streptococci. The disease is managed more successfully by mechanical than by medicinal means.

The discussion was opened by Dr. Harris, followed by Drs. Sharp, Kahlo, Ruddell and Crum.

Dr. W. L. McClain, of Scottsburg, next read a paper on "Opsonins and Opsonic Index." He said that the technique of determining the opsonic index is long and difficult and none but those who have access to a laboratory and have had much laboratory experience can hope to get consistent results. It is to be hoped that simpler methods of technique will be discovered in the near future so that the general practitioner can apply it in his practice, for in the discovery of a method of determining the opsonic index and its application to the vaccination method of treating certain infectious diseases, we have a new and valuable therapeutic agent.

The paper was discussed by Drs. Crum, Sharp and Flynn.

Dr. C. H. Emery, of Bedford, presented a paper on "Iritis; Importance of Early Diagnosis and Treatment," which was discussed by Drs. Leach, Stalker, Graham and Gatterer.

Dr. George D. Kahlo, of French Lick, read a paper on "Diabetes." Discussion was opened by Dr. Walker, followed by Drs. McClain, Sharp, Peyton, Duncan, Leach and Cohen.

After a short address by Dr. J. Nathan, of Louisville, Kentucky, the meeting adjourned, the next session to be held at French Lick.

Adjourned.

DAVID COHEN, Sec.

EIGHTH COUNCILOR DISTRICT.

The semi-annual meeting of the Eighth Councilor District Medical Society was held in Portland on Thursday, April 16. The meeting was to have been held in the Methodist Church but on account of the high waters which flooded the basement it was necessary to hold the meeting in the Presbyterian Church, and this being a smaller building, was taxed to its utmost to accommodate the visitors. The meeting was a little out of the ordinary in that the doctors' wives were invited.

The business session concluded with the election of

officers for the coming year, and Dr. Granville Reynard, of Union City, was chosen president; Dr. M. M. Clapper, of Hartford City, vice-president; and Dr. M. A. Austin, of Anderson, was re-elected for a third term as secretary-treasurer.

The morning session was devoted to a symposium on the question of "Race Suicide." The Hon. Emerson McGriff, of Portland, introduced the topic with an extremely interesting paper covering the economic questions involved, considering quality rather than quantity the desideratum to be striven for. Its tone was so helpful and full of truth that the paper was immediately recommended for publication in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Dr. W. W. Wadsworth, of Muncie, took up the question from the practitioner's viewpoint, and Dr. Etta Charles, of Summitville, discussed the mother's side of the question. These last two papers gave a review of the everyday experiences of the average doctor. The Hon. Frank L. Snyder, of Portland, had prepared a paper covering the medico-legal questions involved, but was called out of the city and could not give the excellent paper he had prepared. All these papers were commended for their careful and honest presentation of facts, and a motion made that THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION be requested to publish the papers as given in the symposium, and that reprints be secured for more general distribution, especially to teachers. Dr. Charles was requested to return to Portland as the guest of the high school and give the girls a lecture on sexual hygiene.

The society, on the motion of Dr. Garber, voted to have a committee appointed who should formulate resolutions covering the following points:

1. The necessity of teaching, by competent instructors, a thorough knowledge of self and sex to the students in the higher grades of the public schools.
2. The desirability of a better dissemination of vital facts among the laity.
3. The suppression of the advertisements in secular and lay journals and the newspapers, offering relief for real and imagined sexual conditions, and especially those offering relief for sexual indiscretions.
4. Commending suitable instruction making quality rather than quantity the desideratum in family production.
5. Commending the present laws which have to do with the prevention of disease, marriage restrictions, and compulsory sterilization of the incurably insane, idiots and the habitual criminal.

The next meeting will be held in Anderson, in October.

The ladies of the Presbyterian Church furnished a banquet, after which, Dr. Schwartz, acting as toastmaster, called for responses from the following doctors: Dr. W. W. Root, of Parker, spoke on "The Fee Bill." Dr. L. F. Schmauss, of Alexandria, told of the advantages and disadvantages in going to Europe. Dr. H. R. Spikerman, of Muncie, told of the doctor's trials and troubles and how to get rid of them. Dr. S. E. Earp, of Indianapolis, spoke on some things which the doctor ought to do in a political way. Dr. Samuel Hollis, of Hartford City, spoke of the good that an active society can do, and the necessity for their continuance and improvement. Dr. Albert E. Bulson, Jr., of Fort Wayne, did not arrive until too late to enjoy the festivities. However, he made a few remarks on "Medicine as a Side Line."

Adjourned.

M. A. AUSTIN, Sec.

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ORIGINAL ARTICLES

RAYNAUD'S DISEASE: WITH REPORT OF A CASE.*

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In 1862 Raynaud published a thesis, calling special attention to a peculiar affection, usually symmetrical and affecting the extremities, characterized by local ischemia and local asphyxia and frequently terminating in local death.

Before Raynaud's time there had been recognized many obscure cases of spontaneous gangrene in which no occlusion of blood vessels or other tangible cause could be ascertained. Such cases were noted to be apparently idiopathic and others symptomatic in origin and it was even suggested that the cause might be a lesion of the nervous system. Raynaud collected and attempted to classify such cases and advanced a theory of causation. While further observations and some research, especially on peripheral neuritis, modify somewhat his conception of a few cases, yet in a true case of Raynaud's disease his theory of its causation stands practically unaltered.

ETIOLOGY.

The disease is believed to be of a trophic nature, a profound vasomotor disturbance, manifested as a vasomotor spasm. This vasomotor element is not a distinct entity, it is often a symptom of some underlying affection and consequently the supposed causes are many and varied. A very marked proportion of cases affect the female sex, as women are more susceptible to functional nervous disorders. Age also

has an important influence, for the great majority of cases appear between the ages of eighteen and thirty years, although a few cases are seen in childhood and old age. One would naturally expect the weak and puny individual to be predisposed, but on the contrary the great proportion of cases enjoy good health up to the epoch of the invasion. Although idiosyncrasy is a pernicious term, serving in reality to hide our ignorance, yet in the present state of our knowledge it must be used to designate a peculiar morbid susceptibility of some individuals with regard to the extremities. Many cases are found in persons in whom the extremities cool easily, with chilblains frequently occurring in winter and with other seemingly insignificant symptoms which become important when the malady in question becomes manifest. One would think that cold, by lowering tissue resistance and as a direct stimulant of vasomotor irritability producing spasm, may be an exciting cause. Many cases are apparently caused by severe cold, but, on the other hand, in more cases an imperceptible change of temperature was sufficient. The disease generally commences in autumn and spring and especially during the month of November. Raynaud thought that suppression of the menses was a cause, but this seems to be only a coincidence.

I thought it would be of interest to study the relation of the ordinary pus producing bacteria to the disease and determine if an infective gangrene were present. Two methods of examination presented themselves. First, to make deep punctures and aspirate some fluid from the tissues and make cultures; second, to determine the *opsonic indices*. The latter method seemed the most promising of results and the use of the opsonic index as a diagnostic measure has been reported many times and is a standard recog-

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

nized procedure. I am indebted to Dr. Victor Keene for the technic and work of this examination. Preliminary counts showed an unusually large number of erythrocytes, 6,800,000 per cm., with a slight decrease in the number of eosinophiles, 11½ per cent. Technic: Five drops of blood were obtained from each of four apparently healthy persons, mixed and taken as normal. The opsonic index of this blood was taken with a suspension of staphylococcus aureus, one of staph-albus, one of staph-citreus, and one of streptococcus pyogenes. The opsonic index obtained from the normal serum was carefully calculated and then the index of the patient's serum was taken. In the cases of the staph-pyogenes aureus, albus, and streptococcus the patient's serum had practically the same index as the normal serum. In the case of the staph-citreus the patient's serum showed an index nearly 8 per cent. higher than the "normal" serum. We can infer that in this case the process was not associated with any of the ordinary pus producing bacteria.

PATHOLOGY.

This may be considered in few words. Many theories have been advanced. It was thought to be caused by a peripheral neuritis or an endarteritis obliterans. The intermittent nature of the disease and negative microscopical examination of the vessels do not substantiate the latter view. Raynaud himself considered it the result of *vascular spasm*. Its frequent occurrence among women and under the influence of cold, the frequent dimness of vision, the occasional presence of a chill and the phenomena of hemoglobinuria all go to show the probability of vasomotor spasm. The exact cause of this vasomotor spasm is not known. Whether it be due to irritation of the intrinsic nervous mechanism of the vessel walls by a circulating irritant, or by a direct consequence of the sclerosis, or merely an independent neurosis, is still speculative. Osler thinks that the "kidney symptoms, brain symptoms and eye symptoms, etc., are due to angio-spasm." There occurs first, a contraction of the arterioles and capillaries, which explains the first stage; this is followed by dilatation and paralysis of the vessels, giving rise to the livid or blue color.

SYMPTOMATOLOGY.

The patient is most frequently a woman and of young adult age and may give a suggestive history of peculiar susceptibility to changes in temperature. The disease is usually symmetrical,

attacks the extremities and may be divided clinically into three more or less well defined stages. The first phenomenon noted has been termed local syncope because the vessels are in spasm and the parts are of an unusual pallor with resulting marble whiteness and loss of sensation. Local asphyxia, which usually succeeds local syncope or may occur independently of it, now comes on, in which state the vessels are dilated and capillary circulation is quite stagnant, with resulting hardness and dark purplish mottling of the parts. The change from pallor to purplish discoloration does not occur simultaneously in all fingers and toes or whatever parts affected. This produces a peculiar and striking mottling as the shades of purple (asphyxia) intervene with lighter spaces (syncope). There are also swelling, resulting stiffness and pain, the latter being often extreme and associated with an intense itching. More frequently there is anesthesia than pain. Under warmth and proper treatment these symptoms may pass away, reaction takes place and congestion is replaced by active circulation. Such attacks may recur for years without effect, though in extreme cases there may be slight loss of substance. The third stage, or local gangrene is reached only in a few cases. It is due to permanent asphyxia and is simply dry gangrene. The affected part becomes dry, black and cold, while gangrenous blebs appear in the parts adjacent to sound tissue. A line of demarcation appears and the dead part sloughs away, but less extensively than at first seemed likely to be the case. This is important when the question of operative interference is considered. Rarely and only in cases occurring in young children does a fatal termination occur. Among more unusual symptoms of clinical value are hemoglobinuria and associated albuminuria. Dimness of vision, due to retinal syncope, is frequently encountered. At times cerebral symptoms, including torpor and partial loss of consciousness are present, also epilepsy, mania, delusions and even temporary hemiplegia. Peripheral neuritis and arthritic swelling may be present.

DIAGNOSIS.

A typical case of Raynaud's disease presents little difficulty in diagnosis. But in an elderly patient it may be mistaken for senile gangrene.

Embolie gangrene usually affects but one extremity and has other associated symptoms connected with the primary condition. Embolism and thrombosis of the aorta do not give much doubt in a typical case. Only chronic cases

night, at some stages, suggest Raymond's disease, but the fact that only the lower extremities are affected, the progressive character of the lesion and lack of arterial pulsation should rule this out (Keen's System of Surgery).

The following table is taken from the American Practice of Surgery:

Senile Gangrene.		Raynaud's Disease.
Distribution	One limb alone, or first one limb and then the other; usually the lower.	Corresponding parts usually.
Extent	Affecting whole part.	Limited to skin and subcutaneous tissues.
Progress	Begins at one point; apt to be serpiginous.	Definite; several digits on both sides; does not spread.
Arteries	Atheroma.	No change.
Age	Old.	Young; any age.

PROGNOSIS.

Raynaud wrote: "In the presenee of these atrocious and persistent pains, of this deep blaek discoloration invading at the same time the hands up to the base of each digit; the feet up to the tarsus; the nose up to the root; I ask what well informed doctor, who, seeing, so to speak, his patient die at all extremities at the same time would not give a most gloomy prognosis?" The outlook for permanent reecovery is not very favorable, although it is quite possible under favorable circumstances to outgrow the tendeney, espeecially if the etiologic factor can be removed. The progress of the disease serves somewhat as a guide in the prognosis. Paradoxieal as it seems, early gangrene, as when blaek dry sloughs form in from ten to twelve days after the invasion of severe symptoms, is quite likely to be arrested and cure results after four to five months of elimination. On the other hand, where milder symptoms persist, as cooling and eyanosis recurring from time to time, a more prolonged course of misery and suffering may be expected.

TREATMENT.

Persons very suseeptible to changes in temperature and presenting mild symptoms of Raynaud's disease, should be advised to maintain their health up to a high standard by appropriate exereise and nourishing food, and they should proteet themselves by woolen elothing. When the attaek comes on, the parts should be earefully massaged, wrapped in wool and artificial heat applied. These prophylaeitic measures are very important, because when the disease is well started the treatment is far from being satisfae-tory. There is no course of treatment known which will remove the vasomotor irritability. At best, we can hope to retard the onward progress of the disease, improve the nutrition of the parts and restore general health. The nitrites

have done good in some eases. The eonstant galvanic current may be used aeording to the eonvenient method of Barlow: immerse the asphyxiated parts in a large basin containing warm salt solution. Apply one pole of a eonstant eurrent battery to upper part of the limb, thus eonverting the salt and water into an electrode. Apply eurrent as strongly as patient can eomfortably bear and it is well to make and break the eurrent freely, so as to get repeated moderate eontractions of the limb. The patient should be instrueted to make voluntary move-ments of the digits while galvanism is applied. Oeeasional applications of the faradic eurrent to the affected parts is well recommended. In ehronic eases espeecially, galvanism does most good, and when applied along with daily massage and Swedish movements, nutrition of the limb is mueh favored and gangrene staved off for a long time. When pain is severe it may be necessary to use opium. The gangrene is benign and simple protection and rest is all that is needed. Severe eases must be treated on surgical prinieples. Amputation should not be performed until the line of demareation is definite. The outlook after amputation is more hopeful and better than in ease of extensive atheroma of the vessels or in diabetic gangrene.

CASE 1.—History of A. T. Oeeupation, book-keeper; age, 35; nationality, German deseent; married, and the father of three healthy ehildren.

Family History.—Father living, apparently healthy at 70; his parents died, one at 82, one at 72. Father had a brother who was troubled greatly with his feet, supposedly rheumatism, and whose physicians were at one time considering amputation. This man died suddenly at 48 years. Mother healthy at 69 years; her parents died, one at 50, of abdominal trouble, and one at 45, from throat trouble.

Personal History.—Is seventh ehild. No eom-lication at birth. Breast-fed infant. All other ehildren that survived ehildhood are healthy.

Previous Illness.—Summer eomplaint at 2 years; rapid reecovery; scarlet fever at 3 years, followed by prolonged convalesenee. Physieian said kidneys were affected. Child was stiff in legs for several months. Measles at 16 years. Rapid reecovery.

Present Illness.—In July, 1901, while bathing in a lake, patient eut plantar surfaee of left foot at third toe. This healed in about four weeks. However, pain eontinued and in about four months area broke open and diseharged for perhaps one month, when it healed by use of loeal applications. Patient has suffered sinee that time with sharp, shooting pains radiating through both feet to leg above ankle.

In 1903, patient was troubled greatly with these pains, and small areas of neerosis appeared

on both feet. Healed without patient losing time from work.

In February, 1906, skin on third toe of right foot began sloughing along border of nail. necrosis continued until toe fractured and was amputated in June and healed after about four weeks by granulation.

In February, 1907, fourth toe of right foot became involved, but healed in about eight weeks by topical applications. In July of same year fourth toe again began to slough, followed in four weeks by first toe, then fifth toe, then scar of former amputation, and then second toe; sloughing continued to spread until February, 1908, when leg was amputated.

The extension of the slough was always preceded for perhaps two weeks by period of intense pain, starting in toe and radiating well into lower portion of leg. The veins of entire foot were very prominent, but during extreme pain would diminish in size by contraction.

Area about necrosis would become deep purple and swollen, then skin would rise and serum and then pus form under skin, and area would break down, extending to deeper tissues and to spontaneous amputation in case of fourth toe.

Repeated urine examination showed a trace of albumin of transitory appearance. Urea diminished. Otherwise normal.

On my visit February 4, 1907, I found patient in bed, presenting a clinical picture of great suffering. The only pulsation found of any artery was over femoral in Scarper's triangle. On consultation with his former family physician, Dr. H. F. Beckman, we concluded that amputation was the only possible chance for prolongation of life. To this the patient consented, and on February 6, 1908, we amputated at junction of middle and lower third of thigh. At the end of first week there was quite a discharge, which was readily controlled by local antiseptics, and patient left hospital after third week. He is using artificial limb at the present writing and is apparently in good condition.

DISCUSSION.

Dr. J. A. McDonald, Indianapolis: This disease, to my mind, belongs to the great group of diseases or syndromes which are becoming gradually better understood or more frequently recognized. They are that class characterized by local manifestations of disturbed circulation, the ischemias and local plethoras with or without edema, a group attracting a great deal of attention, and where not recognized is capable of causing serious error and very unfortunate mistakes. For example, the group of local edemas, the intestinal intumescent colic which may cause a symptom complex which certainly can not be easily and sometimes not at all differentiated

from intestinal obstruction and intussusception, which only on careful study of the history may be recognized: local disturbances in the fingers or hands or in the brain, which bring me to local edemas of the brain. I have recently seen a case diagnosticated as hemiplegia wherein the post-mortem showed disturbance of the kidney. Within the same week another case diagnosed as probably uremia, with local apoplectic manifestations, proved to be an actual apoplexy. What probably happened in the first case, which was diagnosticated hemiplegia, was a local edema, preceded by headaches, a sudden, sharp attack following, being altogether characteristic of apoplexy, being either meningitic or edema of the cortex, and no doubt belonged to this group of cases. Following them came peripheral manifestations, as local manifestations or local edema and peripheral angioneurotic disturbances, particularly spasm. I shall not go into it further except to call attention to the possibility of error in cervico-pachy- or leptomenigitis. The sole manifestation is pain in the fingers, continuing for hours and hours, perhaps for days. But it is paroxysmal, as it passes off. This may also occur in lumbar pachymenigitis. There is a group of erythemas coming in children which belong to this class, but they are not at present properly elucidated. Heredity is probably the most important factor, a vicious heredity producing unstable splanchnic or vasomotor conditions which precipitates the attack.

Dr. John Kolmer, Indianapolis: I do not believe any medical treatment whatever will benefit a genuine case of Raynaud's disease. Opium is advocated for pain, nitroglycerin is also advocated, and all the other drugs that have effect upon the peripheral blood vessels by dilating or contracting them, but a genuine case will result in gangrene, sloughing and amputation. I have here the history of a case under observation last winter, and which has been in progress since 1901. The case was sent to Chicago and was under the observation of Dr. Bevan and Dr. Billings. After two weeks' consideration the patient was sent home as incurable and was refused amputation. I do not wish to state this to you in any bragging way at all, but we must as physicians and surgeons never give up, no matter how little the chance may be. We must give the patient the last chance, like the drowning man who grasps at the straw. He came to me on the eighth day of February. I was impressed that something should be done for the patient and I said to him I believed it to be rational surgery to remove the offending part.

The urine was loaded with pus and tube casts. They consented, but were told beforehand of the possibility of death. I amputated at the junction of the middle and lower thirds of the femur. The patient made an uneventful recovery and I am happy to say is to-day able to wear an artificial limb and pursue his work.

Symposium on Obstetrics.

THE MANAGEMENT OF NORMAL LABOR.*

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In the management of all labor cases a thorough and an early appreciation of the case is of the greatest value. There are some procedures which should be routine before the onset of labor. The measurement of the pelvis is very important, but much can be learned by simple inspection. Short women often have unusually broad pelves and may have precipitate deliveries, but on the other hand, a generally small stature may suggest a general contraction of the pelvis. An acute pubic angle means a similarity to the male pelvis, and in such cases dystocia may be expected. Pelvic deformities may be suggested if in primiparae during the last month before the onset of labor the abdomen is prominent and pendulous, there being probably a discrepancy between the size of the head and the inlet. Also if the woman stands with one hip elevated there may be some deformity due to tilting of the pelvis.

The history of rickets should be inquired into carefully. The variations in the lozenge or rhomboid of Michaelis, the four points of which are formed by the spine of the last lumbar vertebra above, the tip of the sacrum below, and the posterior spines of the ileum or either side are very suggestive. The lozenge is diamond shaped in normal women. The upper point sinks towards the level of the line between the spines in rachitic conditions. Spondylolisthesis and justo-minor pelvis are both suggested respectively by asymmetry and a generally contracted lozenge. However, at best, these impressions are only suggestive and all primiparae and such multiparae as give a history of previous hard labors should be carefully measured. The three measures which should be routine are the intercrural, interspinal and the external conjugate. If there is any sug-

gestion of deformity the internal measurements should also be taken.

Nothing is of more importance than the repeated examination of the urine. It should be examined at regular intervals throughout the last three months with especial attention to quantity, reaction, sugar and the relations of albumin and urea. Eclampsia, one of the gravest situations of the lying-in room, can either be avoided, or at least prepared for, if repeated examination of the urine has given warning.

A third and obvious consideration is the correction of any mal-position. If due to the presence of constricting clothing, the abandonment of such may produce a spontaneous version.

When you are called at the onset of labor, the abdominal examination, being by far the most important, should be made first. The four maneuvers of Leopold should be used. The patient having been prepared, lies flat on her back on a hard and even bed. During the first three movements the physician faces the patient.

First Maneuver.—The fundus is first palpated to ascertain its height and which pole of the fetus it contains. The head will be hard and rounded and much more freely ballotable than the breech. The breech is softer and more irregular and less freely movable. Inspection will show from the contour of the ovoid whether or not the long axis of the child is with the long axis of the mother.

Second Maneuver.—The hands are placed flat against either side of patient's abdomen; gentle pressure will reveal a hard resistant surface on one side the back; and irregular nodulations on the other, the small parts. If there is much fluid or the woman is fat it may be necessary for an assistant to maintain deep pressure on one side while you palpate the other. Having ascertained the position of the back you next discover its direction and general outline. These two manipulations give you your conclusion as to the position and presentation of the child.

Third Maneuver.—If labor has not set in and the occiput not engaged, the third maneuver will complete your examination. You grasp the lower part of the abdomen between the thumb and fingers of one hand, depressing your elbow to a level with your hand. If the part has not engaged it will be found to be freely movable. Palpation will indicate upon what side the greatest prominence is felt in head presentation; if on a side with the small parts the head is well flexed and the vertex presents. If on a line with the back, the head is extended and you have a face or brow presentation.

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

Fourth Maneuver.—The fourth maneuver is necessary if the head is engaged. You face the patient's feet, and with the hands almost directly towards the bed, make deep pressure in the pelvis. The degree of flexion is determined in the same manner as in the third maneuver. The depth that your hands take will indicate how far the head is engaged.

Auscultation will confirm your diagnosis as to position. In vertex cases the fetal heart will be heard below the line of the navel and above in breech cases, and will be transmitted through the back. In face cases, the sound will be transmitted through the anterior chest wall and will be less distinct.

An abdominal examination can be made between pains without inconveniencing the patient and has the great advantage that the danger is greatly lessened of infecting her, either by your hand or from her own discharges. To repeat: The points to be learned from an abdominal examination are the presentation and position of the child and its general condition as evidenced by the heart tone; the comparative size of the engaging part and the inlet; the degree of engagement and flexion of the presenting part; and, other things being equal, the probable course of labor.

The examination of the vulva is the next to consider. Suspicion of infection will demand especial precaution in aseptic measures. Varicose veins will indicate a frequent cause of hemorrhage, usually minor in quantity. Edema and swelling from long pressure means that there is more resistance from below than the advancing part is able to overcome, and almost always indicates that sooner or later forceps will be necessary.

The character of the perineum is important. If previously torn, has it been repaired? Scar tissue offers but little resistance and a fresh tear is hard to avoid. A relaxed perineum may mean a precipitate delivery. A short perineum means an easy one, and a long, tight perineum means a long, hard delivery with much advancing and retreating of the head before sufficient relaxation will permit the expressing of the head.

The anterior fourchette demands especial care. It should be examined for abnormality, and care must be taken in delivery to preserve it intact. A laceration into the rectum may offer many difficulties, but an anterior laceration of any extent is far worse.

The internal examination demands especial precaution. It should invariably be a rule that the pubic hair should be shaved and the parts scrubbed and prepared as for a surgical opera-

tion. Also, it has been my custom to have within easy reach a basin of antiseptic solution, preferably lysol, with which, as the case progresses, I can do the necessary sponging. The scrupulous maintenance of asepsis is equally as important as the original attainment of asepsis.

In making a vaginal examination there are three things to be learned: 1. The condition of the passages, which includes the bony and the soft parts. 2. The condition of and the degree of dilatation of the cervix. 3. The presentation.

In examining for the presentation you should confine your manipulation to that part of the presenting part which is exposed. Do not slip your finger inside of the os. In doing so your hand has entered the uterine cavity and thereby has greatly increased the danger of infection.

If the labor is dry and the head fixed, a thinned uterine segment may present an obstacle in diagnosis by being so tightly stretched over the head that the fontanelles and sutures are felt without difficulty, thus giving the impression that dilatation is complete, and only further search will reveal the tight, knife-like edge of the barely obliterated cervix up and behind the advancing part.

Moreover, when dilatation is further advanced the presence of a caput succedaneum is very confusing, the fluctuating tumor being taken for the face, and the swollen face for the breech, differentiation being made through the abdomen.

The management of the first stage of labor in multiparæ is very different from that of primiparæ, owing to the essential difference in the relaxation of the cervix. In multiparæ so little is the resistance that two hours is often sufficient for complete dilatation, whereas in primiparæ from one to three days is commonly consumed in dilating the rigid and unyielding cervix. Unless some sudden emergency presents, interference is not permissible. If the patient becomes exhausted she can be given narcotics and allowed to rest. Codein in three-fourths grain doses and repeated in half an hour is often given. I like to give thirty to fifty grains of chloral by rectum. Morphin and hyoscin have also been reported upon favorably. I have not used them myself. It will be found that after the patient has had some rest that the pains which had probably become nagging in character will once more become active and dilatation proceed without further delay.

Usually the patient feels better during this stage if she is allowed to be on her feet the greater part of the time. Such a position allows the force of gravity to act upon the presenting part and assists in its fixation in the pelvis.

If there is an excess of fluid in the uterus or the head is large, there may be some delay in the engagement of the head. This can be helped by allowing the woman to lie upon the side to which the occiput is supposed to engage, the right side for right positions, and vice versa. It often happens towards the end of this stage that labor is delayed by the presence of a full bladder, and this point is often overlooked. If the occiput has been down for some time the patient may have no sensation herself. A bulging over the pubis will indicate the condition, and if the patient is not able to void, resort must be made to the catheter. The condition is obviously important. Another condition which will in time remedy itself is the presence, when dilatation is practically complete, of an enlarged and edematous anterior lip of the cervix caught between the advancing part and the symphysis. If left to Nature, it may take hours to overcome this obstacle, whereas it is a very simple thing to strip it back before the advancing part. If the head presents, it will usually suffice to strip it up once, but if the breech presents, it may be necessary to replace it many times and to hold it during the pain, since the breech in itself is not sufficiently resistant to prevent its coming down again.

The presence of a show will indicate a rapidly dilating cervix and of the approach of the second stage. Do not ask the patient to bear down at this time. She will give you abundant warning, and a premature effort on her part may result in torn cervix, and, if for no other reason, such an effort unnecessarily exhausts the patient. She will not be able to resist the bearing down pains when they do finally come, and will voluntarily assist herself.

If the patient is not very phlegmatic she should be given, during the second stage, a few drops of chloroform at the beginning of each pain, and just at the end anesthesia must be deepened in order to control all voluntary movement. You do not want to have the head forced through the outlet in a hurry.

After the head has appeared at the vulva, the obstetrician must take his place at the bedside. In multiparæ he will not again remove his hand from the advancing part. In primiparæ it will be sufficient for him to watch the advance until the outlet has been slightly distended. After which, at the beginning of each pain he will push the head down against the perineum so that the perineum is stretched tightly up over the head and artificially dilated. When dilatation of the outlet is about two-thirds complete, the patient is turned on her right side and her left leg elevated, the obstetrician sitting at the patient's

back. (It will be remembered that flexion of the legs tends to tighten the perineum, therefore the legs must be extended as much as possible.) The advance of the head is controlled in the same way until the tight cord-like feel of the anterior fourchette has been softened and the occiput well under the symphysis. Anesthesia is then deepened to narcosis and the head expressed between pains. I say between pains, for the outlet will then be relaxed and will offer less resistance. With one hand on the occiput, the head is crowded well up toward the symphysis, while the other hand pushes the chin up, the chin being plainly felt through the now tightly stretched perineum. The head should be expressed very slowly, the advance being watched with the greatest care. The brows will indicate the presence of the longest diameter, and if they are expressed successfully the danger of laceration is then fairly passed. Too great force should not be used in crowding the head up against the symphysis because of the danger of an anterior tear.

It will require considerable judgment to know just when to deliver the head. Too early delivery means laceration, and too great retardation means discomfort after the delivery from swelling and contusion of the parts induced by too long pressure, the condition being often so aggravated as to require repeated use of the catheter during the three or four days after labor.

As soon as the head is born the woman can be turned on her back and anesthesia stopped. You next examine to see if the cord is around the neck. This condition is very frequently found and is suggested before delivery by pain over the site of the placenta, and also when, after a good advance, the head will make a long retreat a number of times before it can be delivered. If such a condition is present and the cord can be looped over the head or slipped back over the shoulder, well and good; if not, it must be clamped and cut and delivery hastened.

The eyes and mouth are now sponged with boracic acid solution, and internal rotation of the shoulder having taken place, the head is grasped between the hands and firmly depressed toward the bed until the anterior shoulder appears from under the symphysis. The child is then lifted up well away from the perineum and the posterior shoulder slowly withdrawn. If, however, the head has torn the perineum it may be possible to prevent a further tear by pushing the anterior shoulder well up under the symphysis and withdrawing the posterior shoulder first.

Some authorities claim that it is best to wait for the next uterine contraction to deliver the body, and that a premature withdrawal of the

uterine content opens the way for a postpartum hemorrhage. This can be avoided if your assistant grasp the uterus firmly and exerts pressure from above as you slowly withdraw the child.

The cord is tied about two inches from the child's abdomen and looped back to the umbilicus and tied again and cut. This method offers slightly more resistance to infection. Any time within an hour will do for the Credé treatment of the eyes, which I make as routine practice.

In the interval before the third stage the patient should be examined for laceration of the perineum and if any is present it must be sewed up while the parts are still anesthetized from pressure. A cervical tear will show itself by hemorrhage which can not be controlled by the usual abdominal manipulation of the uterus, but unless the hemorrhage is extensive and uncontrollable, an examination and repair may be made at a later time, preferably after involution is complete.

In the course of half an hour if the placenta is not spontaneously delivered, the Credé manipulation may be instituted; the essential points to be remembered are to insure firm uterine contraction before you begin your attempt, and in grasping the uterus to direct it almost directly downward, otherwise the os is apt to be occluded by being pushed against the symphysis. The placenta and membranes must be examined as soon as delivered, for on their complete removal almost more than anything else depends the future health of the woman. If any of the placenta is retained and can not be delivered by the Credé method, the obstetrician is obliged to go up after it. If any of the membrane is retained, the nurse may be instructed to watch for it in the lochia. If it is not expelled naturally, and especially if there is a rise of temperature in the next three or four days it may be washed out with an intra-uterine douche.

The use of ergot after delivery of the placenta is a mooted question. I have yet to see any ill effect from its administration, and I believe that by hastening contraction of the uterus aside from the question of hemorrhage it lessens the danger of infection. It has been my custom to give a drachm at this time, but in addition the uterus is held for an hour, and at any sign of relaxation, or hemorrhage, is massaged.

The after-care of the patient in uncomplicated cases is very simple. The infant is put to the breast after six hours. The nipples must be watched with the greatest care for the appearance of fissures and these must be treated at the time of their appearance. The use of the catheter after delivery must, if possible, be avoided, many cases of profound cystitis having been reported.

Every effort must be made to induce the patient to void her urine. Hot applications over the abdomen, external douche, hot water in the bed pan, running water and hot rectal enema must all be tried, the patient can be propped up in bed or turned on her face. All these failing, if there has been no laceration nor tendency to bleed, the patient may be allowed to sit up. No effort must be spared along this line, and if the patient is successful once there will probably be no further trouble. On the second day the patient is given a dose of oil and after her bowels have moved well her diet can be increased, and on the third day, if there are no untoward symptoms, the patient can be given a full diet.

In conclusion, may I lay especial emphasis on the following points:

1. In the very large majority of cases the diagnosis must be made from the abdominal examination, preferably avoiding vaginal examination.
2. The first stage is intended for dilatation of the os, and for moulding of the presenting part. There is no descent in the first stage.
3. Deliver the patient on her side to protect the perineum.
4. And lastly, follow natural laws as nearly as possible in the after care of the patient.

TOXEMIA OF PREGNANCY.*

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Toxemia, or autointoxication, means an accumulation of toxic substance in the blood. Eclampsia has been considered for a long time as due to such a condition of the blood. Of late, however, not only pernicious vomiting, but most of the minor ailments of pregnancy, have been recognized as being due to the overloading of the maternal organism with the products of the maternal and fetal metabolism. Therefore, such symptoms as nausea, continued vomiting, dizziness, irritability, disturbances of vision, neuralgic pain, etc., gain in importance as forewarning the advent of more serious complications. If the organs destined to protect the organism against autointoxication are in a pathological condition at the onset of pregnancy, a rapid increase of the existing toxemia is to be expected.

We must not overlook the fact that the kidneys are not the only organs which protect a pregnant woman from the pathological autointoxication.

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

One portion of the toxins is eliminated by the kidneys, intestines, skin, and lungs. The remainder, in fact, the largest part, is destroyed by the liver, and eventually by the thyroid gland. It is obvious, therefore, that among organs of defense the liver, next to the kidneys, is most frequently damaged by fatty degeneration, hemorrhage, and acute yellow atrophy. Although but rarely observed, cases of eclampsia terminate fatally, which never show any symptoms of kidney disease, neither clinically nor under postmortem findings. We must infer from that, as far as the destruction of the poison is concerned, that the liver proved insufficient to such an extent that the organism practically succumbed to the poison before secondary changes in the parenchyma of the kidneys could develop. It is the province of the liver to synthesize the lower nitrogenous products of catabolism to urea and uric acid. Its failure to do so is responsible for the accumulation of these substances in the blood, namely, amino-acids, ammonia, and the xanthin bases. Only one, carbaminic acid, is a chemical poison, and this is only found in non-toxic quantities in the blood.

In high degrees of toxemia, unsynthesized nitrogen compounds appear in the urine at the expense of the urea. Not taking into account the nitrogen eliminated in the form of albumen, a high ammonia coefficient (above 5 per cent.) might make up for the low coefficient, so that the total nitrogen amount is seemingly normal. A low urea coefficient, therefore, need not indicate a retention of nitrogen compounds in the system, but only the inability of the liver to anabolize the lower nitrogenous compounds into the higher compounds, urea or uric acid. Therefore, a low percentage of urea must be considered as an indication of a disturbed function of the liver. Such a disturbance may be due to excessive work to be done by the hepatic tissues, owing to the increased amount of toxic substances to be destroyed, or to pathologic changes preventing the liver from doing its normal amount of work.

Hugo Ehrenfest¹ says: "As soon as the equilibrium between the formation of poisonous material and its disposal is disturbed, either by a sudden overwhelming of the maternal system with an excessive amount of toxic substances or on account of insufficient elimination, toxins begin to accumulate in the blood and a vicious circle is established. The blood laden with a pathologic quantity of poisons causes additional changes in the 'kidneys of pregnancy,' and through these nephritis may develop. In this

way the renal function is no longer relatively but is absolutely inefficient. Other poisons are now retained, and these in turn begin to exert a deleterious effect upon the circulatory and nervous systems and the functions of the liver."

Whether secondary anatomical changes take place in the liver or the kidneys depends on the severity of the metabolic disturbance or on the resistant power of the organs; a previously disturbed liver or kidney would naturally succumb sooner than healthy ones. A younger individual, with a higher adaptability to sudden changes, will naturally be less exposed than older primiparas.

That the loss of a seemingly small quantity of albumen through the kidneys should be accompanied by such extensive waste of tissue has always been a puzzle. In fact, it is, but in "higher cases," only an indication of a serious disturbance of metabolism. We have in the so-called kidney of pregnancy a temporary functional disturbance of that organ which is hardly ever followed by a pathological change in the parenchyma.

The advent of casts—granular or hyalin—marks the beginning of a true inflammation. Inversely, the amount of albumen might be exceedingly small. However, casts may be found during the months following the acute attack, and we have to make the diagnosis of a chronic inflammatory process brought on by the overtaking of the kidneys in eliminating the toxic products of metabolism. The pre-existence of nephritis in pregnancy must be diagnosed, in order to realize in time the danger of threatened insufficient elimination. Extra demands that are made on the kidneys, through an increased amount of toxic substances, depend on the presence of unsynthesized lower nitrogenous products of catabolism; the chemical analysis of these substances (amino-acids, ammonia, xanthin bases), if not difficult, demands so much time that a general practitioner could not possibly follow the course of events closely enough to be of any practical value.

As I mentioned above, the increased elimination of ammonia, amino-acid, etc., is accompanied by a decreased elimination of urea. The urea, therefore, can be utilized as a valuable indicator as to the normal or insufficient action of the liver in anabolism of nitrogenous substances.

The presence of albumen in the urine should indicate a disturbance of the function of the kidneys: a decreased amount of urea in the urine would indicate a disturbance of the function of the liver. The presence of albumen and a normal amount of urea indicate the circulation of

1. Practice of Obstetrics, by Peterson.

toxic substances in the blood in sufficient quantities to overtax the kidneys but not the liver.

A low amount of urea, with an absence of albumen, indicates an over-taxing of the liver, the toxic substance, however, not affecting the kidneys. A low percentage of urea and a high percentage of albumen indicate a functional insufficiency of liver and kidneys. Either one of the first two mentioned conditions is a warning that serious disturbances of metabolism exist, and I want to emphasize the fact that a low urea percentage is just as important a symptom as the presence of albumen. In a given case of albuminuria in pregnancy we are permitted to allow a case to go on uninterrupted as long as the percentage of urea does not diminish, even if the amount of albumen should increase perceptibly. The time for interference (induction of labor and bleeding) has come as soon as the urea coefficient decreases and the percentage of albumen increases.

As the insufficiency of the liver precedes the insufficiency of the kidneys, the decrease of urea will be shown in the urine earlier than the increase of albumen. Frequent and careful examinations of the urine for urea and albumen must prove most valuable aids in determining our course of procedure in toxemia of pregnancy.

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PUERPERAL INFECTION.*

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The dictum of Bumm, "Puerpural fever is wound fever; wound fever is wound infection," is a concise and comprehensive statement of the present status of our conception of "child bed fever," i. e., puerpural infection.

That it was, before the days of antiseptics and asepsis, the cause of death of 20 per cent. of women of child bearing age; that it constitutes almost three-fourths of the mortality of the puerperium to-day, to say nothing of the great amount of invalidism; finally, that it at the present time has a mortality of 6 per cent. of women dying between the ages of 20 and 50 years, this being in excess of that of any other disease—perhaps not excepting the great white plague itself—seem facts sufficient to account for our interest in the subject.

The cause and pathology of puerperal infection are essentially those of surgical wound fever

generally, qualified only by the peculiar conditions pertaining to the parturient canal in which the prerequisite wound is universally present. The superficial necrosis of the decidual surface, the underlying delicate and spongy layer, the great vascularity of the parts and the immediate proximity of the peritoneum are anatomic conditions which add greatly to the possibility of infection and also to the seriousness of its course. What then is the manner or source of this wound contamination?

Oliver Wendell Holmes in 1843, and Semmelweis, of Vienna, in 1847, proclaimed it "contagious." To the present time their idea has prevailed with some doubt as to the rare occurrence of the exceptional auto-infection.

In order to determine the possibility of the latter occurrence much work has been undertaken upon the bacterial flora of the vagina of pregnant women. We can not go into the results of such observations here in detail excepting to say that they have been at great variance—from those of Bumm and Sigwart, finding the streptococcus in 74 per cent., to those of Williams, who found it present in none with proper technic.

With such observations from many of our best workers we must concede the question as yet unsettled, though personally we do believe with Williams the lochia to be normally sterile and non-infectious. Infection does occur through the blood current from distant foci—though very rarely—and also as a result of pre-existing gonorrhea. These latter are not, however, cases of auto-infection in the true sense, but rather of secondary implantation.

It is only necessary here to briefly enumerate some of the sources of this contact contamination; these are, first and most frequent, the examining finger or operating hand; then also instruments, bed clothes, hands of the puerpera herself, coitus, bath water, and, in short, any surgically unclean thing which may come in contact with the vulvo-genital region of the puerpera.

The active agents in producing the disease are the following micro-organisms with their respective pathologic conditions:

Streptococcus Pyogenes.—As early as 1865 Mayerhofer demonstrated this organism in the tissues at postmortem examination of several puerpera. Pasteur and Doleris were the first to cultivate it from cases of puerperal infection and many later observers have substantiated their findings and established the streptococcus as the most frequent and most dangerous of all the organisms involved.

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

It occurs altogether in one-third and as the only offender (i.e., in pure culture) in one-fifth of all cases. Zangemeister and Meissel have recently shown a relationship between the many various strains from the saprophytic forms to the virulent ones inclusive. They believe, therefore, that any form may become pathogenic with widely varying virulency, and that a polyvalent specific serum should be possible of development.

Gonnet has suggested a marked difference between the pyogenic streptococcus and the streptococcus gracilis, which latter—saprophytic in character—he finds in the normal vagina; the former only in infected cases. The virulent form is said to give a black spot with white halo on a medium of blood serum and agar, not produced by the saprophyte.

The course of a streptococcus infection may manifest many different forms and vary greatly in its results. The process may remain local or may spread beyond the surface of implantation.

The localized infections may be limited to a perineal laceration, vulvo-vaginal or cervical wound, or the endometrium—one or more or all of these being involved. The infection is usually descending—in the latter instance being carried with the lochial flow to the wounds below—though it may ascend in some cases from wounds in the lower tract to the endometrium by continuity.

The pathologic change in these surfaces is one of superficial necrosis with or without a reactionary wall of granulation tissue—the so-called “wall of leukocytes”—below; this having been demonstrated to be absent or only slightly developed in many of the virulent cases and then permeated with the infectious microbes. The necrosis gives rise to the typical pseudo-membranous investment which varies greatly in thickness—in rare instances amounting to gangrene involving even a part of the tunica muscularis—and is of a grayish white color. These local infections give rise to an initial chill, fever and malaise without any local pain, as a rule.

Septic endometritis rarely remains a local infection. Because of the peculiar vulnerability of the placental site, the infection has a marked tendency to deeper or even generalized invasion resulting in thrombophlebitis, pyemia or septicemia, if the invasion occurs through the vascular system; or in parametritis, perimetritis or peritonitis when spreading through the lymphatics. Pyometria, pyosalpinx and other local abscesses are also often met with. The description of the pathology of these lesions we can not go

minutely into, but shall touch upon them later in considering their diagnosis, prognosis and treatment.

The next organism in importance is the diplococcus of Neisser (gonococcus). It is demonstrated in 10 to 15 per cent. of cases or more, Krönig having found it present in about 30 per cent. of febrile puerpera. More rarely the colon bacillus, gas bacillus of Welch, staphylococcus pyogenes aureus, the typhoid bacillus, pyocyanus and others—some as yet unidentified—have been found in a causal relation.

The colon bacillus is in pure culture in about 5 per cent. of cases and in mixed infection more often. It is said to be quite virulent in combination with the streptococcus—as is also the gas bacillus combination, as shown in a recent report from the Johns Hopkins Hospital.

DIAGNOSIS.

With a temperature above 100.4 F. for more than 24 hours after the bowels have been moved well, thus excluding intestinal auto-intoxication, and when such conditions as typhoid fever, acute miliary-tuberculosis, mastitis and malaria have also been eliminated by careful examination, we may safely presume a case of puerperal infection.

General Examination.—In attempting to differentiate the form of infection we must bear in mind that septic endometritis manifests itself by an initial chill, usually early, and persistent temperature; the abdominal examination revealing slight subinvolution of the uterus, which feels somewhat softer than it should be and which may be slightly tender to pressure.

The lochia is sanguino-purulent or somewhat serous, increased or diminished—in some virulent cases ceasing—and usually odorless. In putrid cases there is an increase in amount of the lochia (unless retained), a foul odor and sometimes frothy character due to gas production. There is, however, a growing tendency to doubt the occurrence—or at any rate the very frequent occurrence—of purely putrefaction processes; rather are they to be considered mixed infections in most instances—and the general condition one of toxemia rather than of sapremia.

Septicemia may be diagnosticated by the early onset with an initial chill without a recurrence, a profound toxic condition with relatively increased rapidity and weakness of the pulse, and in very severe cases by involvement of the sensorium in a delirium, semicoma, and finally coma—without the signs of localization which characterize other forms of the infection. In the most virulent and rapidly fatal cases there being no local signs, excepting sometimes a suppression of the lochia.

The sensorium may, however, remain clear for a long time in some cases.

Peritonitis, with its pain, pulse, tympanitis, vomiting and facies of great suffering, may form a part of the above picture in less rapid and less virulent infections, or may occur alone without septicemia. In very severe cases there may be only a small amount of serum in the abdomen, or there may be fibrin or even pus. Other serous cavities, as the pleura and the pericardium may be involved, with or without marked additional symptoms.

Pyemia, on the other hand, usually has a later onset with recurrence of the chills and the hectic type of temperature and pulse curve, involvement of the pelvis—and in some instances the peripheral—veins, joints and internal organs in the process. Depending upon the systemic resistance and other factors, these foci may or may not suppurate. Verneuil considers the pyemic disease as a secondary infection of the venous thrombi in septicemia.

Thrombosis is usually a very late occurrence and characterized by the marked increasing rapidity of the pulse (climbing), repeated chills, and the pelvic signs (V. I.). Among these venous involvements may be mentioned the femoral, or "phlegmacia alba dolens," and I have seen an edema of the eye in one case which I could explain in no other way than the occurrence of venous thrombosis. The pelvic involvements are of the ovarian, uterine, round ligament and hypogastric veins. We may mention that embolism sometimes occurs here as in any other thrombotic process—causing foci in the lungs, kidneys, liver and other tissues, when pyogenic infection supervenes. These thrombi, though septic, may not become purulent; on the other hand they may discharge pus directly into the circulation.

Parametritis is better diagnosticated by the bimanual examination (V. I.), but sometimes a distinct mass around the fundus, posteriorly, laterally or bilaterally, may be felt in the abdomen with tenderness to touch and manifesting spontaneous pain.

Perimetritis manifests a marked point of excruciating tenderness and pain upon the surface of the uterus, without the inflammatory tumefaction.

Finally, as a part of the general examination, blood cultures and a leukocyte count should be made, although not indispensable to our search for diagnostic or prognostic aids.

Our duty now becomes that of determining the condition of the genital tract and the bacteriologic cause of the lesions in order to guide our opinions as to prognosis and direct our treatment.

For this local examination we must have the patient in a favorable position at the edge of her bed or on a table, and in the lithotomy position so that we can inspect the tract under a good light—the vulva and surroundings having been previously thoroughly cleansed and the bladder emptied.

Careful inspection of the vulvar region will reveal to one the condition of vulvar or perineal wounds. After this inspection we introduce a speculum and inspect the vagina up to the fornices, the condition of the wounds being thus easily seen. The condition of the uterine cavity is now made known by the appearances of the cervix on simple inspection, the inner cervical surface being a part and a counterpart of the surface of the whole endometrium.

If the vulvo-vaginal wounds and the portio vaginalis show a fresh red granulation surface, we may have a sapremia—a putrefaction fever—but not an infection. The putrid malodorous lochia of sapremia does not affect the appearance of the wounds.

On the other hand, if the wounds and cervix do not appear clean and fresh, but show a grayish white, membranous coat, we recognize the necrotic surface due to microbial infection.

Our next routine step in the examination is that of obtaining cultures and smears for immediate examination from the wounds and uterine contents. (Lochia.).

Gönnner and Döderlein introduced this step in accurate diagnosis some twenty years ago and it has gradually made its way into general use, though even now some of our best workers disapprove of it, declaring it useless.

The lochia is taken according to the procedure of Döderlein with any of the glass uterine collecting catheters which have been devised with or without suction as the case may necessitate. (I have used a long, female catheter when no other tube was available). Care in preventing contamination of the tube and the usual technic of making cultures and smears must be observed.

The bimanual pelvic examination and a digital exploration of the uterine cavity—the latter only in cases where we are not sure from previous examination of the "after birth" that the cavity is clean and always preceding the bimanual—are now in order. The bimanual should discover the presence of localized swellings or exudates in or around the uterus and the condition of the broad ligaments, tubes and ovaries. Venous thrombi may also be felt as hard cylindrical masses in the ligaments.

Pyosalpinx may be the result of the septic form of diseases, or, more usually of gonorrheal,

and I wish to take up briefly the diagnosis of the latter at this point.

Many cases of gonorrheal cervicitis cause no symptoms, and are, therefore, unsuspected until after labor, when the infection travels upward into the uterine cavity and thence to the adnexa—tubes especially—and the first symptoms of gonorrheal disease are produced.

The disease sets in late in the puerperium—it may be even after the patient is up and around—with fever, severe pain in the lower abdomen on one or both sides and the appearance of a purulent flow from the uterus, in which the diplococci are plentiful.

In my limited experience this has been the most frequent form of infection in the puerperium and the one which we would naturally expect to find most often in institution work, where all precautions are taken against the occurrence of the contagious form.

I have on my records a case of gonorrheal endometritis with a parametritis filling the lateral iliac regions almost as high as the navel with repeated chills and fluctuation of temperature from 100 to 105.5—the pyemic type. In this case the onset at the sixth day and the organism alone in smears of the lochia made the diagnosis and a favorable prognosis immediately possible.

Because of prognosis and treatment the main questions of diagnosis are: 1. Have we (a) simple retention with sapremia; (b) local or limited infection—septic-intoxication; or (c), septicemia (or pyemia)? 2. Are we dealing with (a) a gonococcic or (b) streptococcic or other virulent infection?

PROGNOSIS.

Simple retention of lochia or of secundines with purely putrefactive changes are, when properly cared for, favorable conditions. Gonorrhea, even in its severest form with parametritis, salpingitis, pelvic peritonitis, chills, severe pain, high temperature, and, in short, the greatest signs of distress, gives a good prognosis for life though less favorable so far as future invalidism is concerned.

On the other hand, septic wounds, especially when the cervix and uterine cavity are involved, are to be seriously regarded—especially if the streptococcus be demonstrated—though the condition may remain toxemic. So much for the results of lochial examination.

Still more grave are septicemia or pyemia and septic peritonitis, the latter being usually considered a mortal condition. Usually the earlier the onset and the greater the constitutional symp-

toms, especially the condition of the pulse, the graver the prognosis—gonorrhea here excepted. Much, however, depends upon the close observation and experience of the attendant, for, as a rule, septicemia or pyemia are only clinically diagnosed, though the blood cultures may show the organism in some cases, which must then be considered grave.

PROPHYLAXIS.

As in all the realm of infections and contagious diseases, of which this is one of the very gravest—prevention is the most important concern of the physician. Asepsis, through and with the aid of antisepsis, constitutes the key to success.

Semmelweis, by having his students and nurses cleanse their hands with chlorin water, reduced the mortality of his clinic from 10 per cent. to 1 per cent., this being the birth of antiseptic prophylaxis. At the present day the practice of prevention of infection should be succinctly stated, the "conduct of labor."

Briefly, the following points should always be borne in mind:

1. The reduction of vaginal examinations to the minimum and then only with sterile rubber gloves and after pedantic preparation of the examiner's hands and the patient's vulvar region. It seems pertinent here to mention the vaginal so-called prophylactic douche only to condemn it.

2. Reduction of interference with natural labor to its minimum of absolute indications.

3. Prevention of retention of secundines and clots.

4. Immediate repair of wounds—excepting slight cervical, the latter naturally remaining unobserved.

5. The most conscientious avoidance on the part of the physician of exposure of his person to contact with highly infectious cases. (These matters will doubtless be taken up in detail by Dr. Ketcham).

Dr. De Lee reports only one death in over 8,000 deliveries in an outpatient dispensary practice from sepsis—this greatest of all records having been attained by strict adherence to the above principles.

TREATMENT.

The subject of the active or curative treatment of this condition is, I take it, one of the most confused and chaotic at present before the profession. In the nature of the condition there is little hope of an absolute decision upon the many and perplexing problems, especially those of surgical interference.

Fortunately, however, we do have some strict indications for therapeutic activity. The first of these is the removal or destruction of the attacking organisms at their points of entry, i. e., a local cleansing of all wounds, or pus cavities, involved; the second a systemic support of the patient, including, of course, promotion of immunity.

The first indication is one for local treatment. Wounds of the vulvo-vaginal regions, and cervix as well, are best treated by antiseptic applications—tincture of iodine, carbolic acid, bichlorid or others—and the stitches of perineal wounds should be removed for the treatment if the wound be unclean. The uterine must be emptied if its cavity is not already clean and free drainage obtained.

It is concerning the method best adapted to this end that the storm of dissension is greatest. The Germans and many Americans adhere to the intra-uterine douche—advised by Fritsch—the finger first clearing away retained particles.

In France, Vienna and by many in England, notably Sinclair, the curette is universally used, followed by various cleansing and antiseptic treatments. Most authorities agree that whatever of these methods is applied, it must be done early to be of avail and is harmful and useless after the infection has penetrated through the uterine lining.

If the examination has revealed a smooth uterine cavity I believe the cleansing douche of several liters of sterile solution—salt, boric acid, or acetate of aluminum in very weak solutions—sufficient.

The argument of some workers that the uterine wound surface should be as thoroughly cleansed as the external wounds seems to me quite pertinent, but it is very doubtful if strong antiseptics will sterilize the cavity with only a short period of contact and long periods are dangerous. Therefore, if bichlorid douches, or others of the stronger solutions, are used, they should be followed by sterile water or salt solution flushing.

If, however, there be rough masses, the finger or the curette must remove them. I cannot see any harm in the use of the curette in experienced, careful hands, and I believe with Sinclair that the sharp instrument is the one of choice, being more effective and less dangerous than the dull form. If subinvolution is marked, the uterus very spacious, the recesses difficult to reach and its lining membranous, I believe the finger futile and the curette indicated—just as in superficial wounds. I make gonococcus infections and am inclined also to make streptococcus cases exceptions to this rule—as emphatically taught by

Bumm, Williams and others of the more conservative practitioners; believing that even the douche point may produce harm.

The first interference, whether douching alone or mechanical separation of contents followed by the douche, should be done at the earliest possible moment and thoroughly once for all. A general or morphin and whiskey anesthesia—the latter highly recommended by Sinclair—may be necessary for the curetage. Alcohol suggested by Sitsinsky, Corossa, etc., for local application to the uterine cavity in douches, packs, etc., has been lauded, but, as yet, there is not sufficient evidence for a conclusion.

Various antiseptic gauze packs have been recommended, both for their local bactericidal action and drainage. The bactericide which will not injure living tissue has not yet been found, and local injury to tissue is the one thing we are attempting to avoid; nor do I believe that a gauze strip or pack will enhance drainage in this location.

SURGICAL TREATMENT.

Let us turn our attention to surgical procedures as they appear to be justified and indicated in the following conditions:

1. General septic peritonitis. 2. Abscesses.
3. Septic thrombosis.

Many reports of the favorable results following laparotomy, toilet of the peritoneum, flushing and drainage in these otherwise generally hopeless cases of septic peritonitis lead us to conclude that the attempt should always be made immediately upon diagnosis. It appears that almost if not quite one-half of these cases may thus be saved.

Laparotomy is also indicated for abscesses of the tubes and ovaries as at any other time. Pelvic peritonitic abscesses and abscesses of the uterus not readily accessible per vaginam demand evacuation and drainage by laparotomy.

Hysterectomy seems to me to have a very limited field of usefulness, being indicated when the uterus is so greatly involved that its musculature is rendered almost useless and the abscesses seem doubtful of successful drainage; and in gangrenous or necrotic myoma and carcinoma, as at any other time in life, they being distinctly surgical conditions.

Septic venous thrombosis in the pelvis has also been successfully treated by excision of the thrombotic areas and the section is indicated when a probable diagnosis is made. In this connection I am in full accord with Dr. Geo. H. Noble that "any puerperal case, with pelvic lesions, variable temperature, and climbing pulse, of three or four

weeks' duration without signs of improvement, justifies an operation of some kind, especially if the uterus proves negative as the source of trouble."

For, "if a mistake is made in diagnosis, and the locus infectus is found in the tubes, or abscesses in other parts of the pelvis, no surgical error is committed, for they, too, are in need of serious attention."

He claims a mortality for excision of veins of 28 4/7 per cent. as against 44 4/9 per cent. in hysterectomy, and concludes that "early recognition of septic thrombosis of the pelvic veins and prompt excision is the best means of surgical relief which we can offer our patients—until future experience shall have worked out the solution of this problem."

It seems fairly generally conceded that in general streptococemia surgery and local treatment are to be avoided and likewise in the acute stages of gonorrheal infections. Personally, I believe in prolonged rest and tonic treatment in gonorrhea—with local treatment and surgery only as indicated later after acute symptoms have subsided.

GENERAL TREATMENT.

Support of the patient is first in order and demands liquid, easily digestible diet and alcohol in large amounts, in form of wine, whiskey, champagne, etc. Rectal alimentation may be necessary in rare cases. Of drugs, I employ ergot if there be any sub-involution and strychnia for the general neuro-muscular system, including the heart. Iron is obviously valuable in late stages.

Pelvic pain is best controlled in early stages by the ice bag over the lower abdomen; later the hot bag or priesnitz (warm moist application) may be used. Morphin may be necessary in some cases and is indicated in general peritonitis.

Elimination is aided by increased fluid ingestion and the uses of salt solution either hypodermoclysis or per rectum. I make use of the latter means in almost all cases where the liquid intake by mouth is not sufficient because of anorexia or vomiting. The bowel should be evacuated thoroughly at the onset and daily thereafter, avoiding drastic purges.

Fever and nervous symptoms are best controlled and the skin elimination encouraged by hydrotherapy. I usually employ tepid sponging with a dilute alcohol rub. If any antipyretic drug be needed, sodium salicylate seems to me the drug of choice in moderate doses.

The attempts at systemic disinfection by means of the venous infusion of antiseptic solutions has

fallen into its merited disrepute. Likewise, the organic silver salts.

As regards the serum treatment, many fairly favorable reports have been recorded by such observers as Fromme, Bumm and others. De Lee says that he has also seen a few cases in which he thought improvement due to the serum.

However, changes are so sudden, so frequent and so marked in these cases, without the use of serum, that it will take longer observation upon a larger series of cases to determine its usefulness.

Recent observations make it clear that a polyvalent serum is to be chosen and given in doses of 40 c.c. repeated after eight hours and again 20 or 40 after the second intervening period of eight hours. It should be employed in all severe cases early, even before the bacteriologic report, and in all streptococous infections, whether local or septicemic, including general peritonitis.

It is generally regarded harmless, but the recent work of Vaughan and Novy upon albuminous poisons might show this view to be erroneous, and the possibility of sensitizing a patient so that in later times—weeks or years—other antitoxin injections might be disastrous must be borne in mind until the question of such possibilities be definitely answered.

SIX HUNDRED CASES OF LABOR IN PRIVATE PRACTICE.

HUGH A. COWING, M.D.

MUNCIE, IND.

The obstetrical experience reported in this paper covers a period of about fifteen years, beginning with the year 1890. The cases all occurred in homes in or near Muncie, Ind. Consultation cases are not included. During almost this entire period the writer served as county health officer, and of necessity was frequently in attendance upon contagion.

The desire to make the paper a clinical one has led to the introduction of case-book reports of some complicated cases. These are not presented because they represent ideal management and treatment, but are faithful records of experience.

COMMENTS.

The physician who approaches the lying-in chamber should thoroughly understand his responsibilities, but he should not be depressed by them. He should carry with him sympathy, confidence and hope. Whatever the trial, whatever

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the complication, he should maintain his professional poise. He should be undisturbed by the importunities of the patient or relatives or attendants. With all he should be firm, but conciliatory. Quick to anticipate danger, yet he should not be unduly apprehensive. He should be patient, and also resourceful. He should never hurry unless haste means life.

During pregnancy, by advice and treatment, the physician may greatly contribute to the success of the final issue. Our people are not yet sufficiently trained in the importance of securing professional advice early in pregnancy. The one death reported in this paper was due to convulsions. The writer learned of the patient's condition only at the beginning of labor. Reasonable

wrapped around shoulder and pulseless. Child showed but little life. All efforts at resuscitation failed.

No. 449. April 1, 1901. Age 23. Second. Face presentation. Chin forward. Pains began at 3:30 p. m. March 31. Arrived at 10:30 p. m. Os two-thirds dilated. Membranes ruptured spontaneously at 11 p. m. Long (Hodge) forceps and chloroform 1:30 a. m., April 1. Child born 2 a. m. Face black and swollen. Child cried at once and did well. The third day mother had chill and temperature 104. Had used creolin douche once or twice daily. Gave brisk cathartic and temperature 101 next day. A few chills and some fever for three or four days. This, due, apparently to left ovarian abscess. Had been tender at times since first labor. About the seventh day abscess discharged per vaginam, and tenderness in left ovarian region disappeared and fever subsided suddenly. There was slight tear of perineum. One stitch at once after labor. Child male, 12 pounds.

No. of Cases	Primipare	Multipare	Male	Female	Twins	Still born	Illegitimate	Face presentation	Foot presentation	Face presentation	Occipito post. presentation	Brow presentation	Hand presentation	Arm presentation	Prolapse of Chief	Turning	Forceps	Placenta Previa	Adherent Placenta	Post-partum Hemorrhage	Convulsions	Spin. Bifida	Death of mother
1-20	5	15	9	11		1			1								2						
21-40	5	14	10	11	1				2							1	2						
41-60	7	13	13	7				1						1									
61-80	8	12	9	11		1		1	1														
81-100	6	14	8	12													3			1			
101-120	6	14	11	9		1											2				1		
121-140	7	13	12	8				1				1					1				1		
141-160	11	9	7	13					1								3				1		
161-180	6	14	9	11		1	1			1									1				
181-200	7	13	10	10													2			1			
201-220	4	16	10	10													3						
221-240	8	11	9	11													1		1				
241-260	8	12	10	10		1											2					1	
261-280	12	8	10	10			1	1									2						
281-300	12	8	12	8		1	1										1						
301-320	6	14	10	12	2	1									2	2	1						
321-340	14	6	7	13					1								1			1			
341-360	9	11	12	8													1						
361-380	7	13	14	6							1						1						
381-400	9	11	14	6		1											2				1		
401-420	8	12	10	10					1						1		3				1		
421-440	7	13	19	2	1												1						
441-460	6	14	10	10		1				1									1				
461-480	10	10	10	10				1											3				
481-500	9	11	8	12													1		2				
501-520	8	12	12	8		1															1		1
521-540	9	11	8	13	1	1		2									1						
541-560	8	12	10	10		1										1	2	1			1		
561-580	8	12	8	12													3						
581-600	3	17	9	11																			
Total	235	365	310	295	5	12	4	9	6	2	1	1	1	2	1	4	40	1	9	3	8	1	1

aseptic and antiseptic precautions before, during and after labor and repay the physician in large returns of success. After labor the perineum should be carefully inspected. If lacerated it should be promptly repaired.

FACE PRESENTATION.

No. 178. May 18, 1895. Age 20. First. Pains began at 12 noon May 18. Arrived at 1 p. m. Os dilated 1 inch. Diagnosed face presentation. Labor made good progress with no untoward symptom. Endeavored to correct into vertex by manipulation, but without success. Membranes ruptured spontaneously about 5 p. m. The descent of the child was progressive and rapid, and I could see no indication for interference with forceps. Child born 8 p. m. Cord was

OCCIPITO-POSTERIOR.

No. 371. Aug. 25, 1899. Age 19. First. Vertex. Occipito-post. Pains began 7 p. m., August 24. Arrived at 4 a. m., August 25. Os fully dilated. Membranes ruptured at 6 a. m. Born at 9 a. m. Child small male, delicate, but lived.

FOOTLING.

No. 325. June 17, 1898. Age 19. First. Pains began at 4 a. m. Arrived 10 a. m. Os two-thirds dilated. Footling. Child had probably been dead several days. Under chloroform assisted delivery. Child had ventral hernia which ruptured in delivery and feet deformed. Born 11:30 a. m.

No. 416. July 31, 1900. Age 33. First. Pains began at 7 a. m. Arrived at 9:30 a. m. Os two-thirds

dilated. Footling. At 10:30 a. m. membranes were ruptured, and brought down one foot. Cord protruded, pushed it back. Brought down second foot and made pressure on uterus externally. Born 10:45 a. m. Child alive. Small female, premature (about eight months). Lived eight hours.

BREECH PRESENTATION.

No. 46. June 5, 1892. Age 36. Seventh. Called at 10:30 p. m., the 4th. Os slightly dilated. Pains slight and very far apart. Returned at 11:30 a. m., the 5th. Pains strong and frequent. Os one-half dilated. Diagnosed breech. Right buttock presenting. Woman had fever, distressing cough, freely expectorating purulent sputa. Pains continued strong. Hips born at 2:30 p. m., ruptured membranes at 1:30 p. m. Body followed rapidly. Some difficulty with shoulders and slight laceration of perineum. With right forefinger brought down right arm, which was posterior, and was slow to descend, the hand being up near head. Other arm more easily delivered. Brought abdomen of child forward toward abdomen of mother, and head was born. Husband under my direction made pressure upon fundus during birth of shoulders and head. Child, male, weight 10½ pounds. Vigorous.

No. 127. March 13, 1894. Age 26. First. Pains began at 1 a. m. Not severe until toward noon. Membranes ruptured soon after beginning of labor. Arrived at 1 p. m. Os two-thirds dilated and pains strong. Felt breech of child, though still high. Could feel coccyx of the child distinctly. Labor progressed well. Called Dr. W. H. Kemper, who made external pressure, and I brought child upward to mother's abdomen (occiput to pubes). Child required artificial respiration, but did well.

No. 278. June 17, 1897. Age 24. First. Breech. Labor uneventful. Child small. With birth of hips had woman in attendance make pressure on fundus, and head and arms were easily delivered.

No. 288. Sept. 21, 1897. Age 31. First. Breech. Labor uneventful and of seven hours' duration. Child medium in size. Same method as previous case.

HAND PRESENTING.

No. 47. June 9, 1892. Age 21. Second. Arrived at 4 p. m. Pains had been strong since 12 p. m. Began at 6 a. m. Os two-thirds dilated. Membranes unruptured. Diagnosed hand presentation. Failed to turn by manipulation. Pains continued strong. Avoided rupturing membranes. Had Dr. Green called at 7 a. m. We resolved to now rupture membranes and turn child. At 7:30 ruptured membranes, much water escaping. Dr. Green making pressure over fundus. I succeeded in seizing right foot, which I drew out. Chloroform. After drawing out right leg seized left foot which presented, and soon hips were delivered, but not without considerable traction. Encountered difficulty with arms. Brought right arm, which was posterior, down over chest. Left was well up to face. This was brought down also by hooking forefinger over humerus, and making considerable traction. Brought body over abdomen, making traction, and head was born. Child cyanosed, but resuscitated in 55 minutes. Child large, male. Woman and child did well.

PROLAPSE OF FUNIS.

No. 123. Feb. 7, 1904. Age 29. Vertex. Third. Arrived at 3 a. m. Os dilated 3 inches. Could not ascertain presentation. Membranes unruptured. Pain ineffective.

Returned at 8 a. m. Pains have continued, but not much increase of dilatation. Membranes yet unruptured. Child not engaged in brim. Presentation likely vertex, but still obscure. Woman lost both children during previous labor. Believing that counsel would be best, requested husband to telephone for Dr. G. W. H. Kemper, who came at 9 a. m. We waited upon results of pains for an hour, when we ruptured membranes and found that a prolapse of the cord had prevented the head from engaging in the brim. After repeatedly attempting to replace the cord by manipulation and knee-elbow position, we delivered child with forceps, using chloroform. Child born 11 a. m. Was still at first, but was resuscitated in 10 or 15 minutes. Recovery of both uneventful.

CONVULSIONS.

No. 87. May 31, 1893. Age 22. First. Vertex. Pains began at 4 a. m. Arrived at 4:30 a. m. Os dilated one-half, and pains strong and frequent. At 7:30 a. m. head was well down upon perineum. Labor had been progressive, and there had been no untoward symptoms except a general edema, of which I had no previous knowledge. Pains were growing more and more "stormy," the woman making but little complaint, when without any warning she was seized with a most violent convulsion. Gave her at once a hypodermic of morphin sulph. one-half grain and atropin sulph. 1/75 grain. With the husband administering chloroform under my direction, applied short forceps and easily delivered the child. The whole procedure from the beginning of the convulsion did not consume more than twenty-five minutes. The placenta was delivered in ten minutes, and shortly afterward the woman awoke to complete consciousness. In the course of an hour gave her another hypodermic of morphin one-fourth grain and enjoined perfect quiet. Left B. of K. and morphin and atropin to administer per os. No other convulsion occurred, and her recovery was progressive and complete. Child medium sized, female. Three years later attended this woman in her second labor, which was uneventful. For a few months before labor had examined urine and had given woman eliminative treatment.

No. 104. Age 31. Third. Vertex. Pains began at 7 p. m., but were slight until nearly midnight, when child was born. Arrived about 1:30 and delivered placenta. Woman had pain in her head. She stated that motion of child had ceased two days before. Left morphin and Dover powders. Called next morning and found her complaining bitterly of her head. Swollen face and twitching muscles warned me of approach of a convulsion. Gave her a hypodermic of morphin. Convulsion followed in a few moments. She did not have a second one. Repeated hypodermic in an hour. Darkened the room. At suggestion of Dr. Kemper, I gave one-half teaspoonful of English calomel in melted butter. Received good movement of bowels. Gave bromids. Child born dead. Medium sized, male. Woman promptly recovered.

No. 137. June 6, 1894. Age 33. Sixth. Brow presentation. Pains began at noon. Arrived at 3:30 p. m. Pains strong and frequent. Os nearly dilated. Ruptured membranes at 4 p. m. Woman was quite nervous and this condition continued to increase until in a short time strong contractions of the limbs with rigidity followed each pain, and there was a wandering of the mind. Pupils widely dilated. Gave one-

fourth grain of morphin, 1/100 atropin as these symptoms began to develop. Because of the violence of the symptoms and fearing a severe convulsion, had her inhale chloroform and delivered with short forceps. Child born at 4:30 p. m. Child medium, female. After-treatment: Bromids and morphia for nervousness and cramps, which occasionally developed in limbs.

No. 397. April 16, 1900. First. Vertex. Membranes ruptured without pain 4 a. m. Pains began at 5 a. m. Arrived at 9:30 a. m. Os fully dilated. Born at 1:30 p. m. Child medium sized, male. Woman seemed well. Had slight convulsion at 6:30 p. m. Arrived at 7 p. m. and gave hypodermic morphin one-half grain. Another convulsion at 7:30. None afterward. Good recovery.

No. 419. Aug. 15, 1900. Age 23. First. Vertex. Pains began at 4 p. m., August 14. Arrived at 6:30 p. m. Os fully dilated. Membranes ruptured at 7:30 p. m. Born at 8 p. m. On account of headache I was called at 1 a. m. Gave morphin one-half grain, hypodermic. Convulsions at 5 a. m. Another at 6:30 a. m. and at 8:30 a. m. At 5:30 a. m. gave morphin one-half grain, pilocarpin one-eighth grain. At 8:30 morphin one-half grain. Trained nurse with her after first convulsion. No further convulsion. Good recovery. Child, healthy, male.

No. 507. Feb. 3, 1903. Age 26. First. Vertex. Pains began at 7 p. m., February 2. Much headache. Os slightly dilated. Arrived at 9 p. m. Gave chloral. Called Dr. G. R. Green. At 9:30 convulsion. Ruptured membranes at 10. Much water. Hypodermic morphin one-half grain at 11:15. At 11:30 Dr. Green gave chloroform. Os two-thirds dilated. Applied long forceps. Born 1 a. m., February 3. Male, dead. Cord around neck. Convulsion at 1:30. Morphin one-half grain hypodermic, followed with pilocarpin. Much sweating. Placenta delivered about 1:20. Veratrum viride 30 drops given from time to time. Rallied during the day. At 4 p. m. convulsions returned. Had seven in a few hours. Had 12 in all. Saline enema at 4 p. m. Saline under breasts at 12 p. m. Died in convulsions at 1 a. m., February 4. Had no previous opportunity to prescribe for this case.

No. 566. Feb. 24, 1905. Age 22. First. Pains began 3 a. m. Arrived 2 p. m. Os dilated one-half inch. Chloral (albumin in urine for two months). Had given treatment. Headache. Rigid os. Emetie. Membranes were ruptured about 5 p. m. Forceps 1 a. m., February 24. Born 2 a. m. Convulsion 10 minutes later. Morphin one-half grain and again one-fourth grain at 6 a. m. Norwood tincture. Veratrum 20 gtt. every two hours. Good recovery. No more convulsions.

No. 569. March, 1905. Age 29. Third. Pains began 12 p. m. Labor uneventful. About third day after some exposure woman developed severe headache and became comatose. Albumin in urine. Brisk cathartics. Gave pilocarpin for two days, then sweating by heat for four or five days. Good recovery.

THREATENED CONVULSION.

No. 201. Dec. 12, 1905. Age 35. Ninth. Vertex. Child born in five hours with uneventful labor. This woman had convulsions in a previous labor. For ten days previous to this last confinement she had severe headaches, dizziness, eloudiness of vision, and in the day time, when she imagined the carpet tacks were upside down, endangering the children, and that imag-

inary neighbors were in the room. Urine; no albumin. At 11 a. m., December 11, opened medial cephalic vein and drew off three pints of blood. There was immediate and permanent relief from all troublesome symptoms. Woman confined same night.

PLACENTA PRÆVIA.

No. 553. Nov. 6, 1904. Age 26. Third. Vertex. Pains began 2 a. m. Arrived 6 a. m. Os slightly dilated. Sudden and severe hemorrhage. Lateral placenta prævia. Tamponed with cotton. Called Drs. Spickerman and Mann, who assisted. Chloroform. Removed cotton. Much hemorrhage. Os dilated about three inches. Manual dilatation. Ruptured membranes. Could not apply forceps because of insufficient dilatation. Turned child, bringing down foot, and soon delivered child, which was born at 9 a. m. Placenta quickly followed by Credé's method. Child, male, dead. Woman did well.

ADHERENT PLACENTA.

No. 468. Dec. 1, 1901. Age 21. Second. Vertex. Arrived 5 a. m. Os dilated two inches. Had had pains all night. Had been taking viburnum compound and Dover's powders as needed for pain for a week on account of threatened miscarriage. Returned at 10 a. m. Os two-thirds dilated. Pains ineffective because of hydramnios. Ruptured membranes at 11:30 a. m. Born 12:30 p. m. Gave child attention, and delayed tying cord for half hour. Pulsation of cord continued unusually long, due, no doubt, to adherent placenta. This was delivered in about an hour. Credé's method. Woman quite weak. Child female, small premature (about 8 months). Lived about six hours.

No. 472. Jan. 11, 1902. Age 25. First. Vertex. Was sick with chills and fever for three days before child was born. Had slight pains 8 a. m., January 9, when os dilated one inch. At 8 a. m., January 10, os dilated two inches, but no recent pains. Water broke at 9 a. m., January 11, without pain, but pains soon began. Os two-thirds dilated. Born 4 p. m. Male. weight 7 pounds. Placenta adherent. Removed by Credé's method in 60 minutes.

No. 480. April 9, 1902. Age 26. First. Vertex. Pains began 8 p. m. Membranes ruptured about 3 p. m. Arrived 9:30 p. m. Os dilated one inch. Gave chloral. Returned 12 p. m. Os dilated three inches. Born 5 a. m. Placenta adherent. Credé's method. Placenta delivered 7 a. m. Child, female, weight 8 pounds.

No. 484. June 28, 1902. Age 24. Second. Vertex. Pains began 6 p. m., June 27. Slight during night. Arrived 7 a. m. Os dilated two inches. Membranes ruptured 9 a. m. Fully dilated 10 a. m. Born 12:30 p. m. Placenta adherent. Called Dr. Mann, who gave chloroform, and introduced my hand into uterus, removing placenta. Woman did well. Child, female, weight 8 pounds.

POSTPARTUM HEMORRHAGE.

No. 337. Sept. 29, 1898. Age 25. First. Vertex. Pains began 9 p. m., September 28. Woman small and delicate. Membranes ruptured at 10 p. m. Arrived at 1 a. m., September 29. Os fully dilated. Pains continued quite severe. Head large and slow to mould. At 8:30 a. m. applied (Hodge) forceps, and brought head down to perineum, working slowly with each pain. Removed forceps. Chloroform given by attendants

under my direction. Woman unable to expel child. Applied short forceps at 9:15, bringing head partly past vulva without rupture of perineum. Born 9:30 a. m. Had attendant make compression over uterus while I tied cord. Placenta easily expelled in 15 minutes. Excessive hemorrhage. Passed hand up into uterus. Not contracting. Cleared out a few clots and made pressure externally, manipulating fundus. With the expulsion of placenta, had given two-thirds dram of normal liquid ergot. The hemorrhage being excessive within five minutes afterward, gave another dram of ergot, and uterus being slow to contract I held a piece of ice in uterus until nearly all had melted. Soon had contraction. Woman did well. Child, male, weight 9 pounds.

No. 422. Aug. 22, 1900. Age 25. First. Vertex. Pains began at 4 p. m. Arrived at 7:45 p. m. Os nearly dilated. Pains regular every five minutes and strong. Membranes broke at 9 p. m. Child born 11:30 p. m. No chloroform nor instruments were used. Child cried at once. Placenta away easily in twenty minutes. Had kept one hand externally constantly over uterus, kneading it occasionally. Gave two-thirds dram ergot as soon as placenta was expelled. Hemorrhage began at once. Was very profuse. Uterus refused to contract. Treatment.—Aseptic ergot hypodermically, first cleaning out clots from uterus with hand. Repeated this in a few moments as hemorrhage continued. No effect, so introduced ice in hand into uterus, kneading uterus externally. Some contraction after ten minutes. Woman nearly pulseless. Ergot with strychnin for three or four hours. Child, male, weight 8 pounds. Woman did well.

FORCEPS.

No. 70. Jan. 5, 1893. Age 26. First. Arrived 8 p. m. January 4. Had strong pains since 11 a. m. Os but slightly dilated. Returned at 2 a. m. Os dilated one inch. Pains strong and frequent. Vertex. Labor gradually progressive. Os fully dilated at 10 a. m. At 11 a. m. head well engaged. Pains were stormy every five minutes. At 3 p. m., as but slight progress had been made in the last three hours, applied Hodge forceps and delivered child in twenty-five minutes. Placenta delivered in twenty minutes. Gave ergot. Uterus well contracted, but noticed some tendency to inertia and collection of clots. Remained for some time. Returned at 9 p. m. and removed clots by Credé's method. Perineum lacerated into rectum. On January 7 repaired it with silk sutures under chloroform. Good union resulted and woman made a satisfactory recovery. Child medium size, female.

No. 90. June 15, 1893. Age 40. Second. First labor when she was 20. First saw her on evening of June 14, when pains were slight and no dilatation. Returned at 8 a. m., June 15. Os dilated three inches. Vertex. Pains frequent and regular. Os dilated readily, but head remained upon perineum for about two hours, with but little progress. Applied short forceps at 12 noon, and slowly and cautiously made traction during each pain. Child delivered in about thirty minutes. Placenta delivered in twenty minutes. Child medium size, female.

No. 188. Aug. 14, 1895. Age 25. First. Vertex. Pains began early in morning of August 13 and continued almost regularly during day and night. Arrived at 4:30 a. m., August 14, in country 6 miles. Os dilated two inches. Pains every ten minutes. Os fully

dilated at 10 a. m. Membranes ruptured 11 a. m. Labor tedious. At 7 p. m. os fully dilated and head engaged. At 7 p. m. applied long forceps because of slow progress and uterine inertia. Brought down head from its entrance into strait on to the perineum and removed forceps. Labor was not hastened as to frequency or strength of pain. Woman unable to expel child. Completed labor with short forceps. Child, female, 9½ pounds.

FORCEPS.

No. 374. Sept. 22, 1899. Age 32. First. Vertex. Pains began evening of September 20, when I was called. Membranes had ruptured. No progress. Rested some during the night. Next day had pains far apart. Os slightly dilated at 8 p. m. Pains not effective. Gave chloral in the evening and through the night. Cervix rigid but dilating. At 9 a. m., September 22, os dilated three inches. Pains not very strong and every fifteen minutes. At 2:30 p. m. full dilatation. Applied long forceps. Chloroform. Brought head down to perineum, then applied short forceps, bringing head under arch. Removed short forceps, and child born without rupture of perineum. Child, female, 8 pounds.

No. 385. Nov. 30, 1899. Age 30. First. Vertex. Membranes broke without pain 11 p. m., November 29. Pains began 12 p. m. Arrived 3 a. m. Os dilated. Chloral. Returned 9 a. m. Os fully dilated. Long and short forceps 11 a. m. Born 12 noon. Child, male, 13 pounds.

No. 411. July 1, 1900. Age 26. Second. Pains began 1 a. m., 30th. Arrived 6 a. m. Os dilated one inch. Gave Dover's powder. Returned 10 p. m. Os dilated at 6 a. m. Labor had been severe, progress slow and woman's strength failing. Called Dr. Mann, who gave chloroform at 7:30. Long forceps on head at brim. Slowly brought head down to perineum. Finished with short forceps. Time of using forceps about an hour. Born 9 a. m. Child medium, male. Placenta thirty minutes.

TEDIOUS LABORS.

No. 593. Feb. 12, 1906. Age 34. First. Vertex. Membranes broke without pain at 10:30, February 10. Pains began 11 p. m. Arrived 5 a. m., February 11. Os dilated one inch. Returned 1 a. m., February 12. Os two-thirds dilated. Born 8 a. m. Child, female, weight 10 pounds.

No. 538. March 9, 1904. Age 19. First. Vertex. Pains began at 9 a. m., March 8. Arrived 10 a. m. Slight pains. Os dilated one inch. Returned 7 p. m. and gave chloral. Returned 1 a. m., March 9. Returned 5 a. m. Returned 12 a. m. Returned 3 p. m. Os dilated two inches. Returned 7 p. m. Os nearly dilated. Membrane ruptured at 2:30 p. m. Born at 9:30 p. m. Child medium, female. I attended another case and used forceps 10 a. m. to 2:30 p. m., March 9.

No. 160. Jan. 23, 1905. Age 19. First. Vertex. Pains began morning of January 21. Called at 8 p. m. Pains light and os not dilated and high. Left anodyne. Morphine and atropine. Next morning no progress. Gave chloral 15 grains every two hours and patient rested well between pains, sleeping some. Called two or three times during the day. At 8 p. m. os dilated one inch. Made but little progress during the night, woman sleeping between pains. Returned home at 4 a. m. At 8 a. m. January 23, os dilated three inches. At 10 a. m. os fully dilated. Membranes broke. Child born 4 p. m. This labor was quite tedious, but pro-

gressive; the woman and family were patient, and at no time did I see any indication for the use of forceps. Child, male, weight 8 pounds. At my first visit, evening of January 21, I found this woman's father suffering from erysipelas of the face (in adjoining room). I caused him to be removed to a more distant part of the house and ordered his nurse to refrain from coming into the woman's room, and intervening doors to be kept closed so far as possible. The woman made a good recovery. The case of erysipelas proved obstinate and severe, invading the entire surface of head, then the mucous surfaces of the mouth, nose and ears, and finally producing a cerebral meningitis, from which he died, nearly three weeks after the birth of the child.

No. 308, March 18, 1908. Age 27. First. Vertex. Pains began 4 a. m., March 17, and membranes soon ruptured. Arrived at 7 a. m. Os not dilated. Chloral 10 gr. ever hour from 10 a. m. until 5 p. m., when os dilated one inch. Called two or three times during day. At 11 p. m. os was two-thirds dilated. Dystocia. Parts firm. Head large. Head on perineum 6 a. m., when I used short forceps. Born 7 a. m. Child, female, weight 12 pounds.

No. 441, Feb. 5, 1901. Age 20. First. Vertex. Pains began at 5 p. m., February 3. Arrived 4 a. m., February 4. Os dilated one inch. Gave chloral. Returned three times during day. Pains continued every fifteen minutes except two hours in afternoon, when she slept. Returned again 4 a. m., February 5, and remained. Os dilated two inches. Pains every five and ten minutes. At 10 a. m. os fully dilated. Membranes ruptured at 11 a. m. Born 1 p. m. Child, male, weight 9 pounds.

SEVERE LACERATION.

No. 107, Sept. 16, 1893. Age 19. Second. Pains began 10 a. m. Arrived at 2 p. m. Os one-half inch dilated. Vertex. At 4 p. m. os fully dilated. Membranes ruptured. Pains very strong. Woman short, fleshy and quite muscular. Used some chloroform with good effect. Perineum had evidently been lacerated during first labor. Endeavored but failed to prevent a complete laceration into rectum. Woman had a chill one hour after birth of child, which occurred at 6 p. m. A fever followed lasting two days. Four days after labor, fever having subsided, under chloroform, fastened edges of torn perineal body and united parts with silk sutures. Woman made speedy recovery. Child, female, weight 11 pounds.

MEASLES.

No. 164, Feb. 22, 1895. Age 24. Fourth. Vertex. Pains began at 2 a. m. Arrived 9 a. m. Os fully

dilated and pains strong. Ruptured membranes at 9:15. Child born at 10 a. m. With the birth of child there was a great quantity of water, and lifted the child out of it and had the nurse bail it up with a cup. The woman was broken out with measles, which most likely hastened labor. Child, male, premature, about 8 months. Placenta delivered in fifteen minutes. Woman developed milk leg, but made good recovery in about two weeks.

HARELIP.

No. 119, Dec. 27, 1893. Mrs. A. gave birth to female child with harelip.

No. 166, March 14, 1895. Same woman gave birth to female child with harelip more extensive than first child, involving alveolar process. An operation in each case gave very good result.

LARGEST CHILD.

No. 173, April 21, 1895. Age 28. Vertex. Fifth. Labor easy. Child weighed 13½ pounds.

ANENCEPHALIC.

No. 61, Oct. 8, 1892. Age 30. Called at 1 a. m. Pains began 12 midnight. Arrived 1:30 a. m. Child was born at 1 a. m. Footling. Female. Premature and stillborn. Body and limbs of child well formed, but eyes lay above and close together on small fleshy elevation above shoulders. Anencephalic. Mouth very small. Ears small and stiff. Three years before Dr. G. W. H. Kemper attended same woman, when child was similarly deformed.

Health of the Canal Zone.—The report of Col. William C. Gorgas, U. S. A., chief sanitary officer Canal Zone, for June, shows a reduction in the death rate for white employes for the month as compared with the rate of 1907 of 1.21 per cent.; among colored employes for the same period, a reduction of 20.50 per cent., equivalent to a reduction in the death rate of all employes of 15.18 per cent. Out of the total of 47 deaths during the month 21 were due to accidental violence; 5 were due to malaria, as compared with 8 in the corresponding period of last year; 2 to typhoid fever, as compared with 8 in June, 1907, and 5 from pneumonia, as compared with 30 during the corresponding period of last year, showing a definite improvement along all lines. Of the 4 deaths which occurred among whites from the United States, 3 were from external violence and one from organic heart disease. The first 2 deaths on the Isthmus from hydrophobia occurred in June. There was no quarantinable disease of any kind during the month.

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EDITORIAL

THE THREE DOLLAR LIFE INSURANCE EXAMINATION FEE.

The communication from Dr. Daubenheyer, printed in this issue of *THE JOURNAL*, offers further points for discussion on the subject of the fee which should be received by the physician for making a complete examination for life insurance.

There is no logical reason why a doctor should examine for some companies for \$5, for other companies for \$3, and still other companies for \$2 or even \$1, and render practically the same service in each case. The essence of a life insurance examination is the decision as to whether the applicant is a good risk or not, and essentially the same thorough and painstaking examination is required in every instance before the examiner can intelligently pass an opinion upon the character of the risk. If, to determine the facts, the examiner is entitled to a fee of \$5, then \$5 should be required from every company, whether it be an old line life company, an assessment company or a fraternal organization, and the fee should be the same whether the policy is for \$500 or \$50,000, as the requirements and the responsibilities are the same in each case. If the policy is for a large amount, and the company desires to take unusual precautions, a number of examinations by the same man or different men should be made, each being thorough and complete and the fee in each instance being the established fee. If a life insurance examination is worth only \$3 then that fee should prevail in all instances.

We have always contended that a complete life insurance examination, not including microscopic examination of the urine, is worth \$5, and we are glad to note that there are many companies, a list of which we have published in *THE JOURNAL*, take this view of the question. There are some companies that originally paid \$5 and now pay but \$3, other companies that have never paid over \$3, and still other companies that have never paid over \$1 or \$2 for their insurance examinations. But these companies have not paid these

fees because they thought they were paying all that the services were worth, but because they could get the work done for the amount that they were willing to pay. As long as there are doctors who are willing to make life insurance examinations for one, two and three dollars, there will be insurance companies that will never pay any larger fees, as it is against the policy of most insurance companies to pay any more than they are actually obliged. They pay large salaries to their officers, immense fees to their attorneys for opinions rendered, enormous rentals for palatial office quarters, and large commissions to agents and brokers, but when it comes to paying for the opinion of the doctor, upon whom the life and prosperity of the company depends, they rise up in a burst of indignation and say that a three, two or one dollar fee is all that they will pay for an examination, and that they can secure all the examiners at this rate that their business requires.

Truly it is up to the medical profession to decide whether the insurance companies shall fix fees for professional services rendered or whether the medical men shall have a voice in saying what the services are worth and what amount shall be received for the services. When the medical profession becomes unanimous in the demand for reasonable and just compensation for services rendered, then some consideration will be shown, and not until then.

THE DISTRIBUTION OF BACTERIA IN MILK.

In the August number of the *Archives of Pediatrics*, Dr. Alfred Hess, of New York, discussed the relative distribution of bacteria in bottled milk in its relation to infant feeding, and gives the results of repeated examinations and animal inoculations he has made to prove that the bacteria are not only not equally distributed in the cream and milk, but also that the cream varies in bacterial content in its several layers. And from his work he is able to deduce some very practical and valuable points in the modification of raw cow's milk.

Tables are appended, a glance at the first two of which reveals the fact that, contrary to the heretofore accepted theory that the cream was a homogeneous and uniform suspension of the greater numbers of bacteria, it is the top-most layers of the cream that are highest in bacterial content, such content diminishing as the lean milk is approached. Hence, by removing the upper two ounces a great nidus of bacterial infection is eliminated and a much cleaner milk

results, whose fat percentage can be readily calculated and made the basis for any modification desired. That the same fact holds true for tubercle bacilli, streptococci and other bacteria, he was able to prove by inoculation into guinea-pigs and by smears made with artificially inoculated milk. Rapidly centrifuged milk will, of course, contain relatively fewer bacteria in the cream and more in the sediment than gravity cream.

By this simple procedure of removing the upper two ounces of the bottled milk a much less contaminated milk is available to the great masses to whom certified milk might be a forbidden luxury, and a 3 per cent. milk results that serves admirably for a summer diet for those babies that are being fed upon modified cow's milk. But if it is desired to increase the fat, this can readily be done by computing that with the upper two ounces discarded the next seven ounces give a 12 per cent. milk, next eight ounces a 10 per cent. milk and the next twelve ounces a 7 per cent. milk.

Any method that will materially reduce the bacterial content of milk without depriving it of its vital nutritive properties, as is evidenced by the rickets produced by sterilized milk, should appeal strongly to those interested in the artificial feeding of infants.

"ONE HUNDRED CHRISTIAN SCIENCE CURES."

In the August number of *McClure's Magazine*, under the above caption, Dr. Richard Cabot deals with some of the fallacies and virtues of Christian Science as observed in a series of cases personally investigated. In not one of the cases studied has he been able to find any evidence of the arrest or eradication of an organic disease, the "cures" being either among the functional disorders, usually some form of neurasthenia, or of some disturbance the diagnosis of which was entirely home-made or at least second or third hand. In some ten of the cases no rational diagnosis at all had been or could be made. "Irritable disposition," "an abnormal growth," "weak back," and "an incurable disease" hardly appeal to the average thinking physician as sufficiently definite for diagnostic or therapeutic purposes, yet these are only a few among the multitudinous triumphs of Christian Science as heralded by the official organ, the *Christian Science Journal*. "Seventeen bruises, cuts and breaks," having healed rather slowly under ordinary surgical treatment in a hospital were nevertheless classed as a "cure," and a case of insanity removed from

an insane hospital by Christian Science friends and pronounced cured, remains insane at the present time.

Dr. Cabot is generous enough to credit some of the enthusiasts of this cult with no intention of wilful deceit, but points to the experience of every physician in the daily encounter of patients who come in with their own diagnosis already made and who are honest enough in their own belief, e. g., pain in the back almost invariably leads the average layman to accuse his kidneys, thanks to quack advertising and the advice of solicitous friends.

"Chronic nervous or mental disease is the Christian Scientist's stock of trade," says Dr. Cabot, and hence the peculiar susceptibility of their clientele to most forms of psychotherapy. One only needs observe his acquaintances in this cult to glean the impression that the chiefest ailment with which they are afflicted is themselves, and as Dr. Cabot says, "Christian Scientists do set idle people to work and turn inverted attention outward upon the world—the greatest service that can be done to a human being."

That scientific psychotherapy can be more safely and effectively applied by those who are familiar with physiologic and pathologic processes, a knowledge gained by years of study in these and allied branches, ought to be patent to all who are blessed with an average amount of God's common sense without any of His "special dispensations."

THE FREE CLINIC.

The Indiana University School of Medicine is sending letters to the physicians of Indiana announcing the advantages offered by the State College Hospital at Indianapolis for the free treatment of indigent patients.

No medical school can be counted a successful institution from an educational standpoint unless it affords its students an abundance and variety of clinical material. Every community, and the larger cities in particular, has its quota of worthy poor who are deserving of medical charity, and the state of Indiana can furnish an abundance of clinical material for the medical department of the university without recourse to the pernicious practice of accepting in the clinics patients who are amply able to pay for services rendered. Indiana has been particularly free from the free clinic evil, largely as a result of the determination of the medical colleges to accept in their clinics only the indigent. Now that we have only one regular medical school in Indiana, and that under State control, we hope

that the policy pursued with reference to the free clinics will be similar to the policy pursued by the medical schools that united to form the medical department of the university, in that the clinics will be open to the deserving poor and that class only. The city of Indianapolis alone can furnish an abundance of material for the clinics, and supplemented by the material which can be furnished from various portions of the state, the clinics ought to be overcrowded with material all of the time without the necessity or inclination on the part of those in charge of the clinics to resort to the practice pursued in some cities of accepting patients from any class whether able to pay or not.

The evils of the free clinic to which we refer do not always arise from a determination on the part of the well-to-do patients to secure free services in the clinic, but are in part due to the short-sighted policy of some physicians who in their endeavors to curry favor with their patients often times suggest the free clinic as a means of securing gratuitous professional attention, and the patients are encouraged to take advantage of the opportunity. The physician who follows this practice is injuring himself, for he is educating his patients to seek gratuitous services at the clinics under all circumstances, and when such services can not be secured, to underestimate the value of any services rendered outside of the clinics. This pauperizing of the community has its injurious effect upon the medical profession in general, and in time would end in a decided decrease in the income of every physician in the State, and in many instances would force physicians to adopt some other means of earning a living.

We are firmly convinced that the university authorities have determined upon a course of action that is entirely in keeping with the high aims and objects of the medical department of the university, and in the circular recently issued they indicate that the only patients to whom they are offering the advantages of the State College Hospital wards, are those who are unable to pay for regular hospital fees and medical service. In all probability the privilege will be frequently abused, but we sincerely hope that no medical man will be guilty of aiding the abuse, either directly or indirectly, by referring any patients for free hospital service and attention who are able to pay a fee of any kind whatsoever. The indigent are deserving of charity, and physicians should not hesitate to refer such patients to the free clinics, for without such material—and there is an abundance of it in Indiana—one of the chief features of successful medical teaching would be handicapped.

EDUCATION IN PUBLIC HEALTH.

In his oration on state medicine delivered at the last meeting of the American Medical Association and published in the *Journal of the American Medical Association*, June 13, 1908, Dr. Harrington touched upon some very salient points concerning the shortcomings of the United States in preventive medicine. In the first place, he emphasizes the tremendous interest that is aroused by things commercial among our people and contrasts it with the lethargy displayed toward the more humanitarian projects. As a result of this national trait, it is, relatively speaking, an easy matter to obtain the necessary legislation for the control of those evils that directly touch the pocketbooks of any large number of the people, whereas years of persistent effort are required for the enactment of laws to promote the health of the people and the prolongation of human life. As a specific instance he contrasts the outbreak of yellow fever in the Gulf states in 1905, for the eradication of which epidemic Congress appropriated not one cent, with that of foot and mouth disease in New England in 1902, for which \$500,000 were allowed, the greater part of which was paid to the owners of the slaughtered cattle. Again he calls attention to the extreme hesitancy on the part of the national legislature to enact laws for the protection of the public health for fear of infringing on the sacred rights of state, but immediately such laws concern themselves with commercial interests it becomes apparently an entirely different question. Such was the case with the recent so-called pure food law, which, Harrington says, is not in reality a health law, at all, but one of commerce.

That it becomes practically an impossibility to reckon the nation's financial loss by preventable mortality and morbidity is the fault of the widespread lack of interest in vital statistics, not only among the laity, but even the medical profession itself. And there is but one way to overcome this shortcoming in our national economy, and that is by the education of the masses along the lines of preventive medicine, which duty, of course, devolves primarily upon the medical profession. Though a great deal has been and is being accomplished in their field, yet much remains to be done and this will only be brought about by an unselfish devotion to the task by a united profession. The present systems of health boards, municipal and otherwise, are accomplishing a wonderful amount of good, but they must ever remain handicapped so long as the present system obtains of allowing their tenure of office to remain a matter of political preference. Contrast with such a custom as ours that of England,

Germany and other European countries in which no man receives the appointment to these responsible posts without evidence of years of special training in this particular line of work, and once appointed he is likely to remain in office so long as he renders satisfactory service, independent of petty political prejudices.

The laity should receive due credit for many philanthropic enterprises along medical lines, such as its part in the great tuberculosis crusade, its aid in the establishment of free dispensaries, milk and ice depots for the worthy poor, etc., which shows that once instructed in the ways of doing, its aid will be forthcoming. One of the most direct ways of promoting the interests of preventive medicine then remains that of creating among the laity a demand for a national department of public health with a separate head and an assurance of an adequate support from our national treasury to permit of the broadest and fullest pursuit of all questions that have to do with the health of our people.

EDITORIAL NOTES

THE Intermediate Life Assurance Company, of Evansville, Indiana, has recently notified its medical examiners that on and after August 25, 1908, the medical examination fee will be \$3 for each examination. In writing the medical examiners the company hands out this delicious morsel: "We have adopted a plan whereby we hope to secure a large volume of business, and it will mean, of course, that our examining physicians will have quite a lot of work to do for us." We presume that the "plan" mentioned consists in increasing the commission given the agent for procuring business and a corresponding decrease in the amount paid for medical examinations.

THE department of health of Chicago has recently sent the following notice to physicians: "The department of health suggests: Why not use tuberculin and diagnose your case of consumption *now*? Why wait until there is no hope? Which policy is best for your patient—for the community—or for you? The department will give you the tuberculin."

This is certainly a most commendable departure and one which could with profit be undertaken by the State Board of Health of Indiana. Is it not quite as important that physicians of the rural districts be urged to avail themselves of all means of early diagnosis in the tuberculosis crusade as that those of the cities should be so importuned?

THE communication from Dr. Bird, published in this issue of *THE JOURNAL*, is worthy of the attention of all physicians who have cases referred to them by confrères. Many surgeons and specialists are notoriously negligent in the matter of writing physicians concerning cases referred. We recognize the fact that many of these negligent physicians are very busy men, but that is no excuse for not attending to important correspondence, and in particular showing common courtesy to physicians who have referred cases for attention. In this connection it is not out of place to say that it is generally the men who have the largest practices and who are always the busiest who find time to give attention to the ordinary civilities, including early and proper care of correspondence.

THE Indiana State Board of Health has issued a letter to the people entitled, "Why Not Protect the Health of School Children?" In this the importance of pure air and proper heating and ventilation is urged, the evils of air starvation detailed—all these with the idea, first of preserving the health of the school children, and second of saving the money of the State and increasing the general wellbeing and happiness. Very many valuable suggestions are given concerning the rules to be followed to protect the health of school children, and the circular concludes with the statement that the State Board of Health welcomes and invites inquiries from the people, and is always glad to be of service. We believe that every parent in Indiana should receive a copy of this circular.

IN answer to numerous inquiries, we desire to say again that *THE JOURNAL* is sent regularly to only those whose State Medical Association dues, which includes a subscription to *THE JOURNAL*, have been paid. In a few instances county secretaries have neglected to promptly forward collected dues to the secretary of the State Association, and in consequence some physicians who think they are members in good standing in the State Association are not, and their names are not on the mailing list of *THE JOURNAL*. Failure to pay State Association dues also deprives the delinquent of the privilege of being a member of the American Medical Association, as membership in that body is dependent upon membership in the State Association. Furthermore, the new medical directory soon to be issued by the A. M. A. will credit memberships in county, state and national associations from the record of paid dues.

SINCE the publication of Dr. Hoover's communication with reference to the medical advertising carried by Mr. Bryan's *Commoner*, we have received several letters from physicians saying that they, too, wrote Mr. Bryan concerning the fraudulent character of some of the advertising carried in his paper, and receiving no satisfaction cancelled their subscriptions. It is quite evident that Mr. Bryan thinks more of the many dollars received from medical advertising which swindles the sick and afflicted than he does of the few dollars received from subscriptions from doctors, and he probably cares little for the opinion of the medical profession as long as the subscription list continues to grow. But we would like to ask Mr. Bryan how he eases his conscience when in a burst of oratory he discourses upon the high moral principle which should prevail in our relations with our fellow-men.

AN officer of a life insurance company has recently made the statement that in Kentucky and some other states where it is presumed that no reputable physician makes a life insurance examination for less than \$5, it has been possible to secure examiners from among the very best physicians in every community on the understanding that the fee for examinations is not to exceed \$3. The officer imparting this information says that the men accepting appointments have generally requested that no mention be made of the fact that examinations were to be made for the \$3 rate.

Either this statement is a deliberate falsehood or there are a great many knaves in the medical profession, and we are not quite prepared to take the latter view without further proof. So far as we know there is nothing in the constitution and by-laws or the code of ethics of any medical organization which prevents a medical man from estimating the value of his services as he may wish, but every reputable medical man ought to appreciate the fact that his services in making a thorough and complete life insurance examination are worth \$5, and he should obtain that fee or none at all. If he has a mutual understanding with his fellow practitioners to this effect and then quietly accepts anything which he can get for his work, he is deserving of severe censure at the hands of his confrères who have placed respect and confidence in him. If it is his intention to make life insurance examinations for whatever he can obtain, then let him frankly announce that fact so that his associates will know where he stands.

And, concerning the \$5 insurance examination fee, it may be said that the only way to secure that fee is for a majority of the recognized competent medical men of this country to refuse to make any examinations for any less.

CORRESPONDENCE

THE THREE DOLLAR LIFE INSURANCE EXAMINATION FEE.

BUTLERVILLE, IND., Aug. 12, 1908.

Editor THE JOURNAL:—The question of the proper fee to charge for a life insurance examination has been agitating the profession of this and other states. To examine a man, to pass judgment on him as to the probability of his living his allotted time, to say that he is not a good man physically when he thinks he is all right, or that he is not fit to become a member of the association which he wishes to join, is, for the physician who does this, to assume a responsibility out of proportion to the remuneration received.

To make an intelligent report requires not only competency on the part of the examiner, but a careful and thorough examination of the applicant, which requires considerable time. The examiner owes it to the company as well as to himself to make a report which is accurate and reliable, no matter whether it be in favor of the applicant or not. If the examiner "turns down" the applicant, he probably will lose the applicant's practice and perhaps the practice of some of the applicant's friends, the remuneration of which would amount to many times more than the insurance examination fee. It is quite true that this is not always the case, but I have known many instances where the applicant who was rejected would always look with disfavor upon the physician who did his duty. I wrote life insurance before studying medicine, and while engaged in that line of work discovered that in nearly every case the rejected applicant thought that he had been mistreated and that the examiner was responsible for the maltreatment and from an unwarranted cause.

Considering the expert services rendered and the responsibility assumed, I believe that any professional or business man will say that not less than \$5 should be paid for a life insurance examination if the fee is to be within reason. But the question that comes to my mind is, why do the physicians of Benton County, or any other county or locality, when passing resolutions with reference to life insurance examination fees, de-

cide that the \$5 fee shall apply to only "old line life insurance companies"? Why not say that the fee shall be \$5 for any life insurance examination? Why examine for one class of insurance companies and charge one fee and then do the same amount and kind of work for another class of companies and charge a different fee? The same kind and amount of work ought to be worth as much to a fraternal organization as to a legal reserve company. On a \$1,000 policy there is as great a loss to the one as to the other. In fact, the assessment company loses more, as the applicant pays in less for his insurance, and therefore a thorough examination is of more value to an assessment or to a fraternal organization than to an old line company.

In comparing the examination blanks of different companies it can readily be seen that fraternal orders not only demand more of their examiners, but pay less for the service. So far as I know, physicians all over the country make examinations for the Modern Woodmen for \$1, and the Modern Woodmen require more of an examiner than is required by any old line life insurance company. On the first page of the examination blank of the Modern Woodmen are over one hundred questions to be answered and properly filled out by the examiner, and this in addition to the questions pertaining to the family history, which goes into detail even back to the year in which the grandparents died. To all these questions the physician must write the answers and certify that he has written them personally. Of course, it would be as binding on the company and the applicant if the applicant or the agent filled in these blanks, and it would give the examiner as much information, but I presume the company wants the examiner to earn his \$1. Under the part entitled "Special Report of Camp Physician" the instructions are numerous and demands many. It has even been a source of wonder to me that the examiner was not required to go before a justice of the peace and be sworn.

Now why in the name of reason do physicians make these examinations and comply with all of the exactions of the Modern Woodmen at \$1 for each examination and refuse to do the same work for another organization for less than \$5? Why make this distinction? The work is practically the same, the responsibility is the same and the liability of the company is the same. It is as important to one company as to another to have the poor risks culled out. In fact, the assessment and fraternal companies are more dependent and can not stand loss as well as the

old line companies, and a thorough examination and opinion of an able physician is of more value to them than to the old line companies. Would it be right to pass resolutions to the effect that we shall charge steam railroad companies \$50 for amputating an arm and then charge an electric railroad company only \$10 for the same work?

It strikes me that if we are going to pass resolutions to charge \$5 for an insurance examination we should include all companies and make the fee the same for the same kind of work in every case. No distinction or favoritism should be shown. If the fraternal orders and assessment camps are too poor to pay a reasonable examination fee, they are also too poor to pay their losses. I believe it to be a self-evident truth that the less money a company has or the harder straights they are in financially, the more money they can afford to pay their medical examiners. If the fraternal orders and assessment camps are objects of charity, then give them the service and charge the \$5 to charity, but if any fee is to be accepted from them, then insist that the fee shall be the same as from any other company. Treat all companies alike.

M. F. DAUBENHEYER, M.D.

GREENSBURG, IND., Aug. 7, 1908.

Editor THE JOURNAL:—In the strenuousness of the time have we not lost sight of some of the common civilities? Why does not the surgeon take occasion to keep the practitioner informed as to the progress his patient, whom he has kindly referred for operation, is making?

Very truly yours,

CHARLES R. BIRD.

DEATHS

DR. SAMUEL EISENBEISS died at his home in Elkhart, July 20, from carcinoma of the colon, after an illness of four months, aged 74.

DR. SAMUEL S. HORNE died at his home in Jonesboro, August 9, after a long illness, aged 65. He was a graduate of the Medical College of Ohio, and Medical Department, University of Cincinnati.

DR. JOHN A. MOREHOUSE, for forty-six years a practitioner of Indiana, died at his home in College Park, Huntington, August 1, from cancer

of the stomach, after an illness of six years, aged 69. He graduated from the Physio-Medical Institute, Cincinnati, in 1870.

DR. SOLOMON D. KELL died at his home in Liberty, Ind., August 3, from locomotor ataxia. He had practiced medicine for forty years in Liberty, coming there after graduation from the old Pennsylvania Medical College. For a number of years he served as secretary of the County Board of Health.

DR. THOMAS A. GLASGO, one of the oldest physicians in his county, died at his home in Brazil, Ind., August 8, at the age of 69 years, after an illness of three weeks. Dr. Glasgo began the practice of medicine in Holmes County, Ohio, but had practiced for the last forty years in Brazil. While not an active member of the county society during the last few years, he had been carried on the list of honorary members, and the society voted a floral tribute to his memory and attended the funeral in a body.

PERSONALS

DR. EDWARD J. MCOSCAR, of Fort Wayne, has returned from a European trip.

DR. JOSEPH MAURER, of Marion, is in Chicago, taking a short post-graduate course.

DR. JOHN F. BARNHILL, of Indianapolis, is in Europe, visiting the medical centers.

DR. D. B. TAYLOR, of the Soldiers' Home, has resigned, and is now on a farm in Ohio.

DR. J. M. PINKSTON, of Holton, has been nominated for coroner on the Democratic ticket.

DR. JAMES W. HADLEY and Miss Ethel Stoms, both of Frankfort, were united in marriage July 2.

DR. SCHUYLER A. WHITSITT and Miss Margaret Crosby, both of Kent, were united in marriage June 24.

MASTER BEVAN, son of Dr. R. C. Townsend, was successfully treated for tetanus by Osgood physicians.

DR. L. T. COX, of Napoleon, present Republican representative, has been nominated to succeed himself.

DR. JAY D. NUSBAUM, of Auburn, has been appointed surgeon to the Toledo & Chicago Inter-urban railway.

DR. HARRY C. SHARP, surgeon at the Indiana Reformatory, Jeffersonville, has resigned, to take effect October 1.

DR. HENRY G. LINN, of Rushville, has been taken to the East Haven Hospital, Richmond, for treatment for cholelithiasis.

DR. H. W. LAUTENSCHLAGER, of Dayton, has taken the position made vacant by the departure of Dr. Taylor, of the Soldiers' Home.

DR. HAROLD J. PIERCE, of Cloverland, who recently underwent an operation for appendicitis, has recovered and resumed his practice.

DR. FLOYD G. MCBRIDE, assistant surgeon at the Marion Soldiers' Home, has resigned and will be succeeded by Dr. Lloyd B. Campbell.

DR. J. N. HURTY, secretary of the State Board of Health, has been appointed a director of the National Association for the Study and Prevention of Tuberculosis.

DR. AND MRS. OLIVER JAMES, of Cory, returned August 15 from a summer's tour of Europe. They report a delightful journey through England, Scotland and Germany.

DR. GEORGE D. KAHLO, president of the Indiana State Medical Association, who has been ill with typhoid fever at the Methodist Hospital in Indianapolis, is slowly recovering.

DR. MARY WIDDOP, for several years superintendent of the nurses of Lafayette Soldiers' Home, has been made assistant physician in the State Hospital for the Insane, Longcliff, Logansport.

DRS. J. N. HESS, of New Marion, and Bine Whitlach, of Pierceville, were chosen to read

papers at the annual meeting of the Fourth Councilor District Medical Society, October 22, at Madison.

DR. FRANK RUDOLPH, of Elkhart, has just returned from London, where he has spent three months in Moorefields Hospital. The two previous summers were spent in Vienna, studying diseases of the eye, ear, nose and throat.

NEWS, NOTES AND COMMENTS

FOUNDER'S DAY was observed at Dr. W. B. Fletcher's Sanatorium, August 18, in commemoration of the life and work of Dr. William Baldwin Fletcher, born Aug. 18, 1837, and died April 25, 1907.

Dr. John Ridlon, of Chicago, will read a paper entitled "Lateral Curvature of the Spine," at the meeting of the Twelfth District Medical Society, to be held at Fort Wayne October 27, 1908.

THE newspapers of Indiana announce in glaring headlines that Dr. F. C. Heath, secretary of the Indiana State Medical Association, a life-long Republican, has decided to vote the Democratic ticket this fall and has been delivering political speeches before Democratic audiences in Indianapolis.

THE graduating exercises of the Training School for Nurses of Dr. W. B. Fletcher's Sanatorium were held on August 18, the following receiving the degrees: Luella Schlosser, Blanche P. Bell, Ival M. Hill, Margaret E. McGrath, Olive L. Neal, Mazy DeBertrand and John J. Lynch.

DR. J. L. FREELAND, superintendent of the Indianapolis City Hospital, gave an informal reception in honor of the ex-superintendents at the hospital Tuesday evening, July 28. There was a large attendance of physicians. Short talks were made by Drs. J. M. Kitchen, P. H. Jameson, F. J. Van Vorhees, G. V. Woollen, W. B. McDonald, W. N. Wishard, J. H. Oliver, G. F. Edenharter, G. E. Ferguson, Paul F. Martin and J. L. Thompson. Refreshments and cigars were served in the new laundry building, and the new administration wing was thrown open for public inspection.

Dr. W. D. Hoskins, of Indianapolis, has received from Dr. Flexner, of the Rockefeller

Institute for Medical Research, a supply of anti-meningitis serum for gratuitous distribution among members of the medical profession who wish to use the serum in the treatment of patients and are willing to comply with the conditions and restrictions laid down by the Institute for the use of the serum. In all cases it will be necessary to prove the cases bacteriologically, so that the final records may be complete, and it is incumbent upon the physician who receives the serum to keep a complete record of all cases treated with the serum and furnish a copy of such record to the Rockefeller Institute.

THE State College Hospital, located at 210 North Senate street, Indianapolis, under the control of the Indiana University School of Medicine, is now ready for admittance of surgical, obscure medical, and obstetrical cases among patients who are unable to pay for regular hospital fees and medical services. The hospital is not a place for chronic cases or incurables. The services of the clinical teachers of the faculty are rendered to those patients available for clinical instruction. Patients may be entered in the obstetrical ward and the male and female medical and surgical wards at \$6 per bed per week. An operating room fee of \$5 is charged for surgical cases. The cost of plates is charged where skiagraphs are necessary. Private rooms may be secured at from ten to twenty dollars per week. Patients who can afford private rooms should not be referred to the wards. The hospital is modern in every particular and has seventy beds. For information concerning rules for admission of patients to the hospital, correspondence should be addressed to Dr. Edmund D. Clark, secretary, Indianapolis.

THE following list of committees of the Indiana University School of Medicine is announced:

Advisory Committee: The Dean, Drs. Barnhill, Clark, Earp, T. B. Eastman, Ford, Hutchins, Jameson, Kimberlin, Lyons, Morrison, Myers, Oliver, Porter, Sowder, Sutcliffe, Wishard and Wynn.

Education: Drs. Wynn, Earp, J. R. Eastman, Myers, Parker, Pfaff and Ritter. Curriculum: Ritter, Graham, Myers and Sowder. Library: Parker, Brayton and Reed. Teachers' Associations: Earp, Dodds and Heath. Scientific Publications: O. G. Pfaff, Brayton, Bulson and Earp. Graduate Work: Myers, McCaskey and Ritter.

Hospital Clinics: Drs. Kimberlin, Charlton, T. B. Eastman, Hodges, Hutchins and Wells. Hospitals: Charlton, DeHass, Dorsey and Earp. Obstetrics: Hodges, Beckman and Jackson. Insane Hospital: Hutchins and Neu.

Dispensary: Drs. Morrison, Dodds and Wales.

Laboratories and Museums: Drs. Lyons, Burkhardt and Neu. Museums: Burkhardt, Allen and Ritter. Laboratories: Reed, Dodds, Garrett, Keen, Morris and Neu.

College Hospital: Drs. Sowder, Clark, Kahn, Kimberlin and Lindenmuth.

Finance: Drs. Barnhill, Clark and Hutchins. Buildings and Grounds: Drs. Clark and Lindenmuth. Text-books: Wales and Charlton.

Miscellaneous Affairs: Drs. Wishard, Hood, Hurty and Sterne. External Relations: Wishard, Ford, Kahlo, Porter and Sexton. Social Affairs: Hood, T. Kennedy and Kyle. Student Organizations: Sterne, Link and Woods. Medical Instruction of the Public: Hurty, Potter, Scherer and Sutcliffe.

SOCIETY PROCEEDINGS

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of June 30, 1908.)

The society met in joint session with the clergymen in the assembly room Tuesday evening, with 182 members and guests present. Minutes of previous meeting read and approved.

"The Healing of a Man" was the title of an off-hand talk by Rev. Frank Fox, in which he said that there is much in common between the ministry and the medical profession. He said that a man should not enter the ministry or the medical profession without a call or fitness for the work. We work upon the same subject and upon the same lines, i. e., man. Man is physical and spiritual. Sickness and disease belong to a world that is opposed to God, but God permits it to exist. When a man has broken spiritual laws, then there is need for the minister to bring him back to his proper relation to God. The physician ministers to the physical man and the minister to the spiritual. The body is the temple of God and His spirit dwells within. He spoke of the Emmanuel movement in Boston, or psychic therapy. Ministers and physicians can cooperate in preventive medicine.

"Psychic Research, Its Relation to Science and Theology" was the title of a paper by Dr. H. V. Sweringen.

The papers were discussed by Dr. Porter, Rev. Lenig, Dr. Buchanan and Dr. W. P. Whery. The discussion was closed by Rev. Fox and Dr. Sweringen.

Adjourned. J. C. WALLACE, Secretary.

GRANT COUNTY.

The regular meeting of the Grant County Medical Society was held August 25. The entire evening was

spent in discussing "Typhoid Fever." Dr. G. G. Eckhart presented a young man on whom he intended to operate for supposed stone in the kidney.

Adjourned.

O. W. McQuown, Secretary.

HANCOCK COUNTY.

The Hancock County Medical Society met in the grove at Lake View House, near Greenfield, August 6, with members of the Henry and Wayne County societies as guests. Meeting called to order by President Barnes. In the absence of the secretary, Dr. E. R. Gibbs, Dr. E. F. Sommer was appointed secretary *pro tem*.

"Puerperal Convulsions" was the title of a practical informal talk by Dr. Gronendyke. He reports being called in consultation in fourteen cases, in which but one died. One may well be terrified when called to see such a condition in a human being, the pathological condition about which so little is known. The author said that placenta previa was the worst yet. In such conditions it would seem that the unfortunate woman had little chance for recovery. In puerperal convulsions the liver may be affected, but always recovers to the normal. The condition is, no doubt, due to a toxemia, depending largely upon changes which are due to the presence of the fetus *in utero*. Dr. King, of the University of Pennsylvania, finds albuminuria in nearly all cases, and Edgar says 84 per cent. The author's cases have all had albuminuria. The elimination of urea is increased. Small fees are responsible in many instances for carelessness and lack of preparedness. The cases usually present symptoms a long time before the convulsions come on, and by being properly prepared convulsions can be prevented in many instances. In one case that died there had been no elimination established for fourteen hours after the convulsions came on. In the treatment of puerperal convulsions every case is a rule to itself. Veratrum no doubt has its place in these cases, especially when the pulse is bounding and full, which it nearly always is. Morphine seems to have some effect in producing elimination.

In opening the discussion Dr. Bramkamp, of Richmond, said he had been fortunate in escaping such cases. At the last meeting of the A. M. A. the treatment of emptying the uterus immediately was emphasized.

Dr. Groff, of Greenfield, said that in one of his cases, six months pregnant, he used morphine and chloral to good advantage—patient recovered. In another case convulsions came on after delivery of child; he controlled the convulsions with veratrum, and the patient recovered.

Dr. Heath, of Indianapolis, said that his experience in obstetrics was now ancient history, having treated the eye for eighteen years. Do the eye symptoms spoken of recover completely? Dr. Gronendyke says yes. There are two forms of eye trouble due to albuminuria—one a simple retinitis which disappears entirely, the other of a more malignant type and which is permanent. Blood-letting used to be the routine treatment in such cases and is practiced occasionally in suitable cases.

Dr. Cook, of Anderson, said that the main point in the treatment is the relief of the symptoms. He always carries chloroform and induces labor as soon as possible. The metabolism between child and mother

seems to be the cause of the convulsions or the toxic condition. Chloral, veratrum and codia are preferred by the author to morphia. The ultimate recovery is not satisfactory, as a predisposition seems to be established.

Dr. Adams, of Greenfield, reported a case in which there was complete suppression of urine, and elimination could not be established—patient died. Reported several other cases with recovery.

Dr. Benjamin, of Wilkinson, reported three cases in which two recovered and one died. He has adopted the treatment already emphasized.

Dr. Stevenson, of Richmond, said that any man who would produce pregnancy in a woman who had once had puerperal convulsions should be treated to the same operation on the vas deferens as is used in the institutions of correction and the insane in the State of Indiana. Fortunately chloroform is a vasomotor depressant and is a safe agent in this condition from the fact that the pulse is always full and bounding. After depression comes on, chloroform should not be used.

Dr. Comstock, of Greenfield, Dr. Weller, of Richmond, and Dr. Markley, of Richmond, all agreed with the principles of treatment, namely: every case is a rule to itself; control convulsions; establish elimination, and empty the uterus. Dr. Markley reported a case which died from exhaustion due to convulsions and mentioned the induction of elimination by the use of a tent-like arrangement for holding steam to the body.

Dr. King, of Richmond, said that he disagreed with Dr. Gronendyke in that puerperal convulsion is the worst condition to be met with in the pregnant woman. He said that placenta prævia is the worst yet, to which Dr. Gronendyke concurred. He reported one case of puerperal convulsions with recovery.

Dr. Barned, of Greenfield, asked for information concerning cases in which there was no albuminuria, bowels in good condition and convulsions present. There is little literature on such a condition, but it is supposed to be a nervous irritation of some kind or a vicious circle of the nervous system.

Dr. Gronendyke, in closing, said that all his cases had been purely toxic. Hypodermoclysis is very important in treatment. The apparatus for this purpose is as important as forceps. Heated corn is great for the purpose of diaphoresis. To deliver the child in these cases is no easy task when the os is not patent.

"The County Society and Its Members" was the title of a paper by Dr. Weller. The author said that the county society is of great benefit to the doctor, as it teaches him how to think and to think out loud. He is always enabled to carry home some idea which will prove a jewel. From a social standpoint it is of great benefit; it increases love for profession and brethren. Preparation is the key to success; hence the work of the society in preparation on any subject is of great benefit to all. What a mistake to consider attendance a loss of time because nobody is present who knows more than we do. We should remember that we can learn something from every one, to say nothing of being of benefit to others. We must do our part to lend a helping hand to our brethren. Do not knock.

In the discussion of Dr. Weller's paper much was said in regard to making the meetings of the county society more interesting by Drs. Heath, secretary of the State Medical Association, and Stevenson, counselor of the Sixth District. Special attention was paid

to the idea of doing postgraduate work at these meetings by the use of the cadaver. Dr. Sommer, being secretary and treasurer of the State Anatomical Board, was able to explain how to secure bodies under this act, also the care and preparation of the same.

"Etiology and Prevention of Typhoid Fever" was the title of a paper by Dr. Sommer, in which special stress was laid on sanitation and the care of existing cases to prevent the spread of the disease. The author also mentioned the duty which is laid to the doctor in educating his patients on the nature and cause of the disease in order that they may be better able to prevent its spread, also the spread of the disease by convalescing patients when the feces and urine are still loaded with the bacilli. The method of railroads in allowing the feces of passengers to be scattered along the country, washed into the streams and polluting water supplies was condemned, and is no doubt the cause of many which appear to be sporadic cases. The use of antiseptics in purifying water supplies was spoken of. Copper sulphate seems to have acquired some reputation in that direction.

In the discussion Dr. Bruner emphasized the use of copper sulphate, it being safe, cheap and he believed efficient. That part of the program which was conducted around the dinner table was not slighted in any respect.

Adjourned.

E. FRANCIS SOMMER, Secretary *Pro Tem*.

KOSCIUSKO COUNTY.

The regular meeting of the Kosciusko County Medical Society was held August 18. Meeting called to order by President C. R. Long. The first paper of the afternoon was by Dr. C. E. Thomas, of Leesburg, entitled "Acute and Chronic Ileocolitis," which was discussed by Drs. Cary, McDonald, Long, Howard, Foster and Yocum. "Anatomy and Physiology of Stomach and Intestines" was the title of a paper by Dr. F. J. Young, of Leesburg, the discussion being opened by Dr. Cary, followed by Drs. McDonald, Burket and Warvel. The subject of "Acute and Chronic Gastric Indigestion; Acute Gastritis," was presented by Dr. M. G. Yocum, of Mentone, and was discussed by Drs. Burket, McDonald, Bowser and Cary. Dr. J. L. Warvel, of Sidney, read a paper on "Acute Intestinal Indigestion; Cholera Infantum," which was discussed by Drs. Burket, Ford, Young, Howard, Foster, Bowser, McDonald and President Long.

A letter was read from the Directory Department of the American Medical Association, asking for a list of the advertising doctors and medical companies in the county, which request has been complied with by the secretary.

A congratulatory letter in regard to the society's program was read from Dr. John H. Blackburn, director of the A. M. A. "Course of Postgraduate Study for County Societies."

The secretary reported that there were only seven active physicians left in the county who were supposed to be eligible but who were not yet members of the society. Two more who were eligible were not in active practice. The editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION had kindly sent a copy of THE JOURNAL, a letter and an application blank to each one of these nine. The secretary has also written letters to some of them, enclosing applica-

tion blank and program, while others have been seen personally by members of the society living in the same town.
Adjourned. C. NORMAN HOWARD, Secretary.

LAPORTE COUNTY.

On August 14 the LaPorte County Medical Society departed from its time-honored custom of meeting on dry land, and was called to order by the president, Dr. J. L. Gray, on the waves of Lake Michigan. We were for the afternoon the guests of Dr. F. R. Warren, aboard his new launch *Lucille*, a trim 51-footer of 25 gross tons, graceful in all her lines and beautiful in finish of mahogany and brass. Though the wind was brisk and the breakers rolling, yet such was the steadiness of the craft and the skill of the "skipper" that no serious outbreak of "Mal de Lac" occurred, much to the disgust of certain overzealous ones who hoped for abundance of clinical material in order to demonstrate some "new remedies."

When safely out from land it was discovered that there were no papers on board and only one essayist, who was easily overpowered. Being thus deprived of our "feast of reason," nothing was left us but the "flow of soul," along with such light refreshments as the "skipper's" well-stocked locker afforded. At length, anchored in quiet waters, swimming was declared in order. Then did Allopaths and Homeopaths, discarding therapeutic differences, and their clothing, become for the once Hydropaths, all eager to excel by divers stunts in going to the bottom of things.

Our sorrow that the afternoon was gone was only equaled by our pity for the brethren down state who can not enjoy these fine times, for, though they may substitute something, claiming it "just as good," we know better. Suffice it to say that when again the profession of LaPorte County is overcome by that "tired feeling" it will prescribe:

R. *Lucille*.
(Warren).
Sig. Pro re nata.
Omnes.

Though it may be claimed that this is in a sense a "proprietary article," yet it will be found strictly ethical, thoroughly pleasant, an agreeable vehicle, and when taken with a proper amount of water not inclined to disturb the most sensitive stomach.

While my stammering pen can never do the subject justice, yet we hope that some time again Dr. Warren
"will git us,
when
we're
all
tired
out."
J. W. MILLIGAN, Secretary.

PIKE COUNTY.

The Pike County Medical Society met in regular session August 13, with a large attendance. The paper of the evening was by Dr. Hunter, entitled "Constipation in Children," which was generally discussed. Various case reports were also made, with clinical history and treatments. A very interesting program

is being prepared for the September meeting, and all physicians in the county are cordially invited, whether members or not.
Adjourned. E. S. IMEL, Secretary.

RIPLEY COUNTY.

The regular meeting of the Ripley County Medical Society was held, August 3, at Versailles. The applications for membership of Drs. M. L. Samms, of Morris; H. G. Nelson, of Osgood; C. D. Ryan, of Cross Plains, and Lucien Bailey, of Friendship, were unanimously accepted.
Adjourned. M. JOSEPH COOMES, Secretary.

STEBUEN COUNTY.

The Steuben County Medical Society held its August meeting in Dr. Waller's cottage at Crooked Lake, with eleven members and thirteen guests present, Dr. Brown of Kalamazoo among the number.

The program was opened with two clinical case reports, which were well discussed. "Acute Intestinal Indigestion" was the title of a paper by Dr. Mary T. Ritter, the discussion being opened by Dr. T. F. Wood, followed by Dr. F. B. Humphreys. The next paper read was on the subject, "Public Sanitation and Hygiene," by Dr. T. J. Creel, which very ably brought out the needs of Steuben County along the lines of sanitation. The general discussion was unusually interesting.

The society then adjourned to the Crooked Lake Hotel, where a banquet was served, followed by toasts. The meeting was one of the best ever held in Steuben County.
Adjourned. MARY T. RITTER, Secretary.

WARRICK AND SPENCER COUNTIES.

The Warrick County and Spencer County Medical societies met in joint session at DeGonia Springs, August 11. Meeting called to order at 2 p. m., with Dr. S. W. Stuteville as chairman.

Dr. Edwin Walker, of Evansville, read a paper on "Tuberculosis of the Kidney." The discussion was opened by Dr. P. N. Hoover, of Boonville. Dr. H. Q. White, of Grandview, presented his opinion on "Mineral Water in Treatment of Disease," which was followed by an interesting discussion. Dr. P. N. Hoover gave the symptoms of a patient who suffered from an obstinate case of constipation, from an obscure cause.

It was the consensus of opinion that such joint meetings were profitable in a social as well as a professional way.
Adjourned. DALTON WILSON, Secretary.

NORTHERN TRI-STATE MEDICAL ASSOCIATION.

The thirty-fifth meeting of this Association was held at the Oliver hotel, South Bend, Ind., on July 14. The society was called to order by the President, Dr. Albert E. Bulson, Jr., of Fort Wayne. About 125 members and guests were present at the meeting. The following papers were presented: "Osteomyelitis," by C. A. Daugherty, South Bend; "The Surgical Treatment of Ulcerative and Purulent Cystitis," C. M. Harpster, Toledo; "Mastoid Symptomatology and Treatment," Albert H. Andrews, Chicago; "The Future Hygiene," J. N. Hurty, Indianapolis; "The Etiology and Treat-

ment of Nephro-Enteroptosis," by H. W. Longyear, Detroit; "Conjunctivitis," Walter K. Parker, Detroit; "Traumatic Neuroses, with Special Reference to Litigation," by Lewis Miller, Toledo; address, "The Present Status of Some Ophthalmic Means of General Diagnosis," by Casey A. Wood, Chicago.

Some fifteen or twenty new members were added to the society.

The annual election of officers resulted as follows: President, William A. Dickey, Toledo; vice-president, C. B. de Nancrede, Ann Arbor, Mich.; secretary, William F. Shumaker, Butler; treasurer, J. A. Weitz, Montpelier, Ohio; board of censors, H. F. Mitchell, South Bend; J. A. Dumeau, Toledo, Ohio; and A. W. Crane, of Kalamazoo, Mich.

The Association will hold its mid-winter meeting at Ann Arbor, some time during January, the date to be selected by the officers and committee on arrangements.

SECOND DISTRICT MEDICAL ASSOCIATION.

The third annual meeting of the Second District Medical Association was held in the Knights of Pythias building, Bloomfield, Ind., Thursday, May 14, 1908. It was one of the most successful and enthusiastic meetings in the history of the Second District.

The afternoon session consisted of the following papers: "Should the Country Doctor Do Major Surgery?" by Dr. O. K. McKittrick, discussed by Dr. B. A. Rose; "Hematuria," by Dr. J. F. Spink, discussed by Drs. Allen Pierson and Joe Crowder; "Rupture of Lungs from Injury Without Fracture of Ribs," and report of cases, by Dr. E. T. Sherwood, discussed by Drs. August Knoefel and H. R. Lowder; "Mastitis in the Puerperal Woman," by Dr. H. R. Lowder, discussed by Drs. J. W. Clifford and John Sloan; "Headache as a Symptom," by Dr. John Jones, and "Puerperal Eclampsia," by Dr. W. E. Kessinger, discussed by Drs. J. M. Harrah, H. R. Lowder and B. A. Rose.

At the close of the afternoon session the society and guests were taken en masse via automobiles to the factory of the American Post Company, where the complete process of constructing sheet metal posts was observed. Following this the society spent a very pleasant hour at the Bloomfield Social Club as guests of the club.

The evening session opened with a paper by Drs. Henry Alburger and Fletcher Gardner on the subject, "Hypernephroma and Fibroid Associated with Tuberculosis of Endometrium and Tubes," with specimen and report of case. Paper was discussed by Dr. C. E. Harris. "Therapeutics or No," was the title of a paper presented by Dr. Frank Holland, which was discussed by Drs. E. R. Mason and August Knoefel. Dr. John Sloan read a paper on "Some of the Difficulties That Come to the Private Practitioner in Obstetrical Work." Dr. N. D. Cox read a paper on the subject, "Treatment of Fracture of Clavicle," which was followed by election of officers, resulting as follows: President, Dr. J. E. Harris, Bloomington; vice-president, Dr. Fletcher Gardner, Bloomington; secretary, Dr. Frank Holland.

At the conclusion of the meeting a banquet was enjoyed at the Elmore Hotel.

Adjourned.

FRANK HOLLAND, Sec.

BOOK REVIEWS

INTERNATIONAL CLINICS. Volume 1, Eighteenth Series, 1908. J. B. Lippincott & Co., Philadelphia and London. Cloth. Pp. 309. Price, \$2.00.

A rather unusually interesting volume is here presented, combining articles of considerable practical worth with the more scientific ones. The year's progress in medicine and surgery occupies considerable space and contains much condensed information that is new. The volume is well illustrated.

INTERNATIONAL CLINICS. Volume 2, Eighteenth Series, 1908. J. B. Lippincott & Co., Philadelphia and London. Cloth. Pp. 304. Price, \$2.00.

In this volume are included several articles of interest under the general headings of Treatment, Medicine, Surgery, Gynecology, Ophthalmology, Dermatology, Orthopedics, Pediatrics and Pathology. The volume closes with a contribution by Charles E. Simon on the "Recent Research into the Pathology of Malignant Disease," including some original work by the author which would indicate that ere long the former gloomy prognosis of malignant disease may be altered through the properly selected use of injections of autogenous extracts of the patient's own growth.

TREATMENT OF INTERNAL DISEASES. By Dr. Norbert Ortner, University of Vienna. Edited by Nathaniel Bowditch Potter, M.D., Visiting Physician to New York City Hospital, etc., Instructor in Medicine, Columbia University. Translated by Frederic H. Bartlett, M.D., from the Fourth German Edition. Cloth. Pp. 658. J. B. Lippincott Co., Philadelphia and London.

In this fourth edition the work has been condensed, the prescriptions made to conform to the American Pharmacopeia, and the equivalents in the English scale added to the metric quantities. Temperatures have been transposed to the Fahrenheit scale and, in short, the volume made to meet the demands of the American practitioner. Dr. Potter has rewritten certain sections and added one on treatment of neurasthenia. On the whole, we are inclined to agree with the editor's criticism, viz.: the profusion of prescriptions and the too inherent faith in drugs by the author.

THE TREATMENT OF FRACTURES: WITH NOTES UPON A FEW COMMON DISLOCATIONS. By Chas. L. Seudder, M.D., Surgeon to the Massachusetts General Hospital. Sixth Edition, Revised and Enlarged. Octavo volume of 635 pages, with 854 original illustrations. Philadelphia and London: W. B. Saunders Company, 1907. Buckram, \$5.50 net; Half Morocco, \$7.00 net.

The sixth edition within almost the same number of years, speaks not only for the popularity of the work but also for the commendable effort of the author to keep it well abreast of the times regarding its subject matter.

Already profusely illustrated, even more has been added to this very essential element, to which the x-ray has contributed no small part. More recent bibliography has been recorded, and especial attention has been given to obstetrical skull fractures of the new-born, fractures of the zygoma, malar bone, head and neck of radius, femoral neck, and old, unredressed and pathologic

fractures and dislocations. More attention is directed to the treatment of ununited fractures, operative and otherwise, and more frequent and repeated inspection is urged. The use of the x-ray for the demonstration of results obtained serves a double purpose; both as a therapeutic aid and a measure of protection for the surgeon, in case of legal complications. Indeed it is very pertinently remarked that "when there is doubt of the diagnosis of a fracture, no physician has done his full duty by his patient if he can command skiagraphic examination and has not used it."

The volume is beautifully gotten up, on excellent paper, and with the profuse illustrations and full description should rank first in its line.

PROGRESSIVE MEDICINE. Volume 2, June, 1908. Lea & Febiger, Philadelphia and New York. Pp. 352. Paper. Quarterly. Price, \$6.00 per annum.

In this number are discussed the general subjects of abdominal surgery, gynecology, diseases of the blood, diseases of the glandular and lymphatic systems, metabolic diseases, and ophthalmology. Worthy of especial mention are the extensive and interesting discussions of the general subjects of hernia, by Coley, and cancer of the uterus, by Clark.

THE BLUES (SPLANCHNIC NEURASTHENIA) CAUSES AND CURE. By Albert Abrams, A.M., M.D. (Heidelberg), F.R.M.S., Consulting Physician Denver National Hospital for Consumptives. Illustrated. Third Edition, revised and enlarged. New York: E. B. Treat & Company, 1908. Pp., 287. Cloth, \$1.50.

Despite a few poorly worded clauses and an unpleasant confusion of terms, such as "puerperal" for "gestation" on page 32, and "palpitation" for "palpation" on page 125, this little work proves interesting reading to the general practitioner in that it deals with conditions so commonly encountered in daily work. The author would ascribe most of the phenomena obtaining in neurasthenia to a condition of engorgement (venous) of the abdominal viscera, particularly the liver, and directs his attention to the different methods of relieving this condition. Various useful hints are given, and a treatment outlined that is commendable for its limitation of medication. More can be accomplished by a proper dietary, abdominal and respiratory gymnastics, and a regulation of the habits of life of the patient. The author accords the sinusoidal current an enviable place in the armamentarium of him who would successfully treat the curse of "the blues," believing it superior to all other forms of electrotherapy. Hypnotism, in selected cases, comes in for its share of commendation at the hands of the author.

Certain parts of the book might prove equally interesting reading to both the lay and professional minds.

ABSTRACTS FROM CURRENT MEDICAL LITERATURE

PHYSICIANS IN POLITICS.

A member of the committee on medical legislation comments this week on the work recently accomplished in Ohio, where 105 physicians went to the state convention as delegates of one of the leading parties, the

result being that, for the first time in the history of the country, a state convention adopted a platform containing a declaration in favor of the organization of a national department of health. It is hardly necessary to say that such a plank would never have been adopted had not a large number of physicians been sitting as members of the convention with the right to vote. This is in marked contrast to the attitude of the medical profession heretofore, which has been to send committees to stand without and to plead for desired legislation. Physicians hereafter, if the example of Ohio is of any value, will work and vote for needed reforms as members on the floor of the conventions and legislatures, and will not merely wait as visitors in the lobbies or appear before committees. If better conditions are to be obtained in municipal and state government, it must be through an appreciation of the fact that the proper work of government is administration and not exploitation of the public. With this in view, there is no reason why the physician should not prove as good an administrator as his brother the lawyer, to whom the lion's share of political duties and opportunities has been awarded in the past. Three-fourths of the work of the average legislative body to-day has to do with the questions of administration. There is nothing in the personality, training or experience of the successful physician that would render him less effective in dealing with administrative problems than the lawyer or the business man; neither is there any reason why a physician should not demand and exercise his full rights as a citizen, especially since he is far better fitted by education and experience for dealing adequately with many of the problems of modern legislation than is the average lawyer. It can not be denied that the management and conduct of many of our state institutions would be far better were physicians represented on the legislative committees, or that better sanitary laws would be enacted if physicians had votes in the legislature instead of merely being represented by proxy. The message of the Ohio profession to the physicians of the country is, "If you want a thing done, do not send another, but go yourself." It is hoped that physicians in many other states will follow the example of their Ohio brethren.—*Journal of the A. M. A.*

"The signs of the times" point to a rapid change in the status and work of the medical man. Changes have already occurred within the memory of those now in active practice. Time was when the prospective physician registered with some neighboring doctor, took care of his horse and garden, assisted in a few operations, and read more or less thoroughly the few books on his preceptor's shelves. Having thus spent a few months, he felt duly qualified to hang out his shingle. There were medical schools, too, in which he might listen to the lectures given by the more prominent practitioners, and the most embryo Esculapians sought this means of completing their professional education. The best of these colleges required attendance at only two short sessions, and laboratory work was limited to a little chemistry and anatomy. The line between the scientific physician and the empiric was difficult to discover, and very frequently the man who have never seen the inside of any other educational institution above the district school could look with pity upon his poor neighbor who struggled hard, though entitled to append "A.M., M.D.," to his name.

To-day the people are becoming so educated that they are realizing the difference between the man who knows and the one who tries to look wise. The quack and imposter is finding his position less profitable and more ignoble. Our municipal, state and national health officials are making such war upon the causes of disease that already the amount of sickness is being reduced, and consequently there is less work for the individual physician. There is no longer excuse for permitting any but the thoroughly trained to enter the profession, and those already in must keep up with the advances in the science of medicine. It is not improbable that the average practitioner of twenty-five years' standing shall become an expert bacteriologist, but he may become posted upon the facts of bacteriology and make use of a neighboring laboratory. He should recognize that diphtheria and typhoid fever are the results of special bacilli, and he should know the diagnostic value of tuberculin injections. Every practitioner may make the Tallquist hemoglobin estimation or the agglutometer test for typhoid.

The physician of to-day is rightly expected to be much more thorough in his study of each individual case than was the custom a quarter of a century ago. He must have a better office equipment and a larger library. He must have fewer cases, but spend more time upon each, and he should be paid accordingly.—*The Charlotte Medical Journal*.

The public health planks in the platforms of the two leading political parties ought to be placed in juxtaposition, so that every physician and every layman who is interested can make an odious comparison. The *Lancet-Clinic* is non-partisan, but it can not refrain from expressing the regret that the Republicans have failed to take advantage of an opportunity to go on record for a most important reform. Here is what the politicians of that party want the intelligent voters to applaud and swallow: "We commend the efforts designed to secure greater efficiency in public health, and favor such legislation as will effect this purpose." As originally drafted this plank might have been endorsed as promising something respectable, but now it is meaningless and vapid. Here is the Democratic health plank: "We advocate the organization of all national public health agencies into a National Bureau of Public Health, with such power over sanitary conditions connected with factories, mines, tenements, child labor and other such subjects as are properly within the jurisdiction of the Federal Government and do not interfere with the power of the states controlling public health agencies." Further comment is unnecessary at this time. But the unprejudiced reader will do some effective thinking.—*The Lancet-Clinic*.

Practicing medicine is a pretty dangerous thing for the patient if the man doesn't know anything about the science, and sometimes it is rather dangerous for the alleged practitioner himself, as was the case with a fellow out in Massachusetts who sold a person two bottles of "catarrh cure" that contained cocaine. The catarrh curist was arrested, fined \$50, and put in jail—a practical lesson to all who have no business to deal in medicine.

Then there was that woman, mentioned in the papers the other day, who gave the little girl attending her daughter's party some of her headache medicine, and

then put the child to bed to sleep it off. The child went to sleep and never wakened again.

But these overt acts are not much worse than the simple carelessness of some people, as was the case of that woman who left her "heart medicine" on the table, where her little girl got it and ate a portion of the tablets. In a few hours the child was dead.

Sometimes these little medicine adventures do not result fatally. But most of them, if ignorantly taken, manage to get around among the organs somewhere and do more or less damage. It is about as bad to deal haphazard with powerful cures as it is to go meandering about a magazine with a lighted candle.—*The Ohio State Medical Journal*.

The bills now before the New York State Legislature "to prevent cruelty by regulating experiments upon living animals" will seriously interfere with research work should they become laws, and it is the duty of every physician to use his best endeavors to defeat them.

These bills seek to define and fix by law the cases in which an anesthetic must be, or need not be, given to an animal; the cases in which an animal must be, or need not be, killed immediately at the end of the experiment, and if such experiment "is calculated to cause pain or distress" it becomes a misdemeanor unless it conforms with the sections of the bill.

The laity becomes the judge and jury of all original work where animal experimentation is needful and if the future is to be judged by the same hysterical outbursts as in the past, the outlook is not bright for the scientific advancement of the art of medicine in those states where such laws may prevail.—*Pediatrics*.

SOME doctors who have been annoyed by the frequent and unauthorized repetition of prescriptions have been inquiring for an ink which will last about as long as a bottle of medicine or a box of pills. We select the following from pharmaceutical formulas: Iodin, 0.35; potassium iodid, 0.35; mucil. acacia, 8.00; aqua ad. oz. 60.00. Dissolve the potassium iodid in one dram of water, add the iodine, and when it is dissolved add more water and the mucilage. Use the ink on glazed paper. The writing disappears in about four days. Another method is to boil some nut galls in some nitric acid and add to the infusion gum arabic and a little sulphuric acid. However plain the writing may be at first it will disappear in a few days. The latter formula is found in *Practical Druggist*.—*The Medical Fortnightly*.

THE howl about vivisection goes regretfully on. No question is so self-evident but that there are supporters for either side. Animal life is precious and should be considered in a greater or less measure as sacred. Human life, though, should be held so far above animal life as the blue vaulted skies are above the earth. If the sacrifice of the lives of a thousand—yes, a million—dumb animals, will give us the knowledge for saving some human lives, let us shed tears, not of sorrow for the animals, but of joy for the human.—*The Medical Fortnightly*.

OSTEOPATH NOT A PHYSICIAN.—The Corporation Counsel of New York City, George L. Sterling, has advised the Board of Health that it should not register osteopaths, and that it should decline to receive death certificates signed by them.—*Journal A. M. A.*, April 18, 1908.

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ORIGINAL ARTICLES

THE SURGICAL TREATMENT OF EXOPHTHALMIC GOITRE.*

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The value of the surgical treatment of exophthalmic goitre is emphasized by Dr. Barker in the following words: "In the very early cases, surgery is capable of curing nearly 100 per cent.; even in the outspoken cases almost 75 per cent. can be cured by operation judiciously planned and skillfully performed; and the mortality, now about 5 per cent., can be further reduced. Internal medicine, up to this time, has been utterly unable to obtain results comparable with these." This same view regarding the superiority of surgical over medical treatment is held by many internists. However, they do not mean that every case of Graves' disease should be operated upon as soon as the diagnosis is made. We frequently see mild but typical cases of exophthalmic goitre, especially those cases coming on at puberty and in early pregnancies, and also those acute cases following certain infections, which can be practically cured by medical treatment, the essential element of which is rest in bed. In these cases the thyroid gland seldom returns to its normal size, and there is also a tendency for the symptoms to return at various times; but with intelligent patients, who can be made to appreciate the value of rest as soon as symptoms appear, medical treatment is probably a safer and a more comfortable procedure than operation. As a certain number of cases of Graves' disease do improve very markedly under a non-operative treatment, one feels that in all

cases there should be given the benefit of the doubt, and medical treatment used for a period of from two to four months before operation is advised. If at the end of this time operation is found to be necessary, the result will be much more favorable on account of the previous rest and preparation. The indications for operation, and the best time to perform it, varies with individual patients; but, in general, they may be stated as follows:

In the primary form of the disease, that is, in those cases where the goitre is of the soft, vascular type arising in an apparently normal gland, operation should be performed when, after three months of medical treatment, the symptoms are worse or at a standstill; or when, in spite of a general improvement in many of the symptoms, the pulse-rate remains permanently high. Also in all cases where the patient is unable to carry on his regular work, on account of general weakness and nervousness; or when the degree of exophthalmos is so great as to lead to corneal disturbances. No case is so far advanced as to contraindicate operation. However, these serious cases especially demand a preparation in the form of rest and medical treatment for a few weeks before operation is attempted. The indications given by Dr. Charles Mayo for this pre-operative preparation are, a pulse that can not be counted continuously because of uneven tension, gastric crises and diarrhea, and edema of the feet and hands.

In the secondary forms of Graves' disease, that is, in those cases where symptoms of hyperthyroidism supervene upon a pre-existing thyroid tumor, an operation is practically always indicated, and medical treatment should not be attempted except as a preparation for operation. Exophthalmic symptoms have been seen to follow all forms of tumors of the thyroid gland, cysts,

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

simple colloid adenoma, fetal adenoma, and carcinoma. The mere existence of these tumors is an indication for operation, and the added exophthalmic symptoms makes this even more imperative. Moreover, the operative treatment of these secondary forms of disease, with the exception of those arising from carcinoma, have given universally good results, with an exceedingly low mortality.

Perhaps in no disease treated surgically is the estimation of the patient's resistance more necessary than in exophthalmic goitre. The degree of hypertrophy and dilatation of the heart should be ascertained as accurately as possible, together with the pulse-rate and blood-pressure changes throughout the day. The changes in the vascular system should be noted after a moderate exertion, as a rough indication as to how the patient will stand the operation. The preparation of the patient before operation, by rest in bed and modified diet, is a point that should be emphasized. If the medical treatment has not continued up until the time of operation, the majority of patients will do much better if they are given a period of from one to two weeks, depending upon the condition of the heart and nervous system, of absolute rest.

The question of the proper anesthetic is still an undecided one. Deaths have occurred with both local and general anesthesia. Kocher and Halsted prefer the local infiltration with cocaine solution, while the Mayos use ether. Other operators use chloroform alone or with oxygen. The advantages of general anesthesia are that the patient, already in a highly nervous state, is free from pain and discomfort, and that the operator can do his work more easily and more rapidly. Local anesthesia is generally used in the form of Schleich's solution, which is a 1/2000 cocaine in normal salt solution, to which is added a small amount of morphin. This can be used in large quantities without giving an excessive dose of cocaine. All pain is practically abolished, so far as cutting is concerned; but traction on the tissues, and the weight of the artery forceps are very often uncomfortable. Local anesthesia has the advantage of throwing less strain upon the heart, and of producing less mucus in the throat than general anesthesia. The mere fact that the patient is conscious prevents the operator from pressing or dragging upon the trachea and cutting off the air supply, which is very easily done; and also by having the patient talk while working in the region of the recurrent laryngeal nerve, he is able to escape cutting the nerve, by the changes of the patient's voice when the nerve is approached. Dr. Halsted says that in spite of

the fact that operation done under local anesthesia may produce a certain amount of shock in an irritable and nervous patient, nevertheless he considers the local safer than a general anesthesia.

With the exception of Jonesco's operation of excising the cervical sympathetics, all operative procedures aim at reducing the secreting parenchyma of the thyroid gland. The resection of the sympathetics relieves some of the symptoms, especially the exophthalmos; but this operation is probably based on unsound principles, gives uncertain results, and has now become practically obsolete. Attempts have been made to reduce the substance of the gland by the use of the *x*-ray and also by burying a bulb of radium in a lobe; but I find no definite cures following these methods. The injection of caustics into the substance of the gland has given perfect results in some few cases; but this procedure is dangerous, and decidedly unsurgical. The ligation of one or more of the thyroid arteries, in an attempt to produce an atrophy of the gland, has been done with good results in some cases. The benefit is only temporary, however; for it is difficult to regulate the degree of atrophy by this means. The ligation of two arteries is seldom sufficient, while the tying of three or four has lead to tetany, and even necrosis of the entire gland. Moreover, in the case of very large goitre, ligation alone may be even more difficult than resection. There is a field for simple ligation, however; and that is in those cases where the symptoms are very severe, and where an acute thyroidism, which generally follows resection, might be sufficient to cause death. In these cases a preliminary ligation of the arteries of one side should be done, but more than two should never be tied at the same operation.

At the present time the operative treatment of Graves' disease consists in a partial resection of the thyroid gland. This consists in removing a part or the entire lobe of the more enlarged side. The ideal operation is one where the thyroid tissue left is equal to the normal amount. The more exactly this is done the better will be the result. When too little gland is removed the symptoms will be improved but the disease will not be cured. If too much is taken away, symptoms of thyroid insufficiency will appear, which will necessitate thyroid feeding. It is better, however, to err on the side of taking away too little than too much. The main points in this operation are as follows: The incision most commonly used is the transverse or collar incision of Kocher. One of the serious objections to this operation in young women is the resulting

scar in the neck. This disfigurement can generally be overcome by marking with silver nitrate the line where a close-fitting necklace falls. By making the incision along this line the scar can generally be completely hidden by the necklace, afterward. After the muscle has been divided, and the external capsule of the gland incised, the thyroid will be seen as a purplish-colored mass covered with a very thin connective tissue capsule, under which run many large, friable veins. In cutting down upon and dissecting out the lobe great care should be taken not to soil the tissues with blood, as the staining of the areolar tissue makes the dissection more difficult, and also harder to avoid important structures. This soiling can generally be avoided to a large extent by clamping all vessels before cutting them. The dissection of the gland is carried out between the external and internal capsules, and this is generally very easily done over the anterior and external surfaces of the gland, and up over its superior pole. In dissecting the posterior and interior surfaces of the lobe, great care must be taken to avoid two important structures, the para-thyroids and the recurrent laryngeal nerve.

The para-thyroids are small, glandular bodies situated on the posterior and inner surface of the thyroid gland. Each lobe generally possesses two of these glands, one connected with the superior, the other with the inferior thyroid arteries. The para-thyroids are small, disc-like bodies, about a quarter of an inch in diameter and lighter in color than the thyroid tissue. At present it is generally accepted that post-operative tetany is due to the removal of the para-thyroids. Even the excision of two of these may be followed by bad results. It is, therefore, important to do everything possible to save these important little structures. This can only be done when the field is bloodless, so that they can be seen; and when the thyroid arteries and their branches can be ligated distal to the para-thyroid artery. Charles Mayo leaves the para-thyroid undisturbed, by what he calls the "sub-capsular method of dissection." This consists in slicing off the posterior part of the gland, leaving the para-thyroids untouched between the layer of internal capsule and a thin layer of thyroid tissue. Halsted prefers the ultra-ligation method, of tying the thyroid arteries distal to the para-thyroid branch, and then dissecting the bodies away from the surface of the thyroid gland. Both of these methods are based on the same principle, but are somewhat more difficult than the simple ligation of the main thyroid trunks. With the

knowledge of the importance of the para-thyroids an attempt should be made to save them in all cases.

On continuing the dissection downward, next to the trachea, we come close to the region of the recurrent laryngeal nerve. This can often be seen and avoided, if the field is perfectly bloodless. When local anesthesia is used it is generally very easy to avoid this nerve by gently picking up all tissue with forceps before cutting, and at the same time requesting the patient to count. As soon as the nerve is caught in the forceps a marked change in the voice will be noted.

When the lobe is entirely removed, all bleeding points are stopped, the cavity is flushed with normal salt solution to remove any thyroid secretion that may be in the wound, the muscles and skin are sutured, and a small gutta percha drain is placed from the depth of the cavity to the outer angle of the skin-wound. This drainage is most important, for in most cases it prevents or reduces, at least, post-operative thyroidism, or "thyroid fever," as it is sometimes called. This condition is practically always seen to a greater or less degree, and is due to the rapid absorption of the thyroid secretion that comes from the cut surface of the gland, or that has been squeezed out during the dissection. It shows itself by an intensification of all symptoms, to which is added fever that may reach as high as 104 to 105 degrees. When very severe this may lead to death. Acute thyroidism can generally be reduced to an insignificant degree by proper drainage of the wound, and in favorable cases disappears in from 24 to 36 hours.

The post-operative treatment consists in keeping the patient in bed, in a semi-sitting position, and giving large quantities of cracked ice or ice water. The patient should stay in bed for one week at least, or longer, depending upon the subsidence of the symptoms. Improvements have been seen within 48 hours after operation, while in other cases months may pass before the benefits of the operation are seen. As a rule the tachycardia is the first symptom to improve, next the nervous manifestations, and last, the exophthalmos. In fact, the exophthalmos may persist when all other symptoms are entirely gone.

It is difficult to obtain accurate figures showing the results of operative treatment. From the statistics of Heineck, Kocher, Halsted, and the Mayos, it would seem that in general we can conclude that the operation in all cases, both mild and severe, promises a cure in from 75 to 80 per cent. Deaths due directly to the operation, or following close after it, have been due to the anesthetic, hemorrhage, tetany, acute

hyperthyroidism, influenza, and pneumonia; and with different operators the mortality has ranged from 2 to 5 per cent. Most of the cases that survive the operation, and are not completely cured, are greatly benefited. A very small number of cases are not improved in the least. It is difficult to obtain the number of recurrences, but they are probably not very great. When they do recur it is generally due to not enough gland being removed, or to a subsequent hypertrophy of the remaining portion of the gland.

While partial resection of the thyroid gland cures from 75 to 80 per cent. of all cases, and this number will probably be greatly increased when we get the cases earlier, nevertheless we must not think that we have solved the whole problem of treatment until we learn more in regard to the cause of the disease. There is no doubt that the thyroid gland undergoes marked changes in Graves' disease, but these changes are admitted by practically every one to be identical with those compensatory changes experimentally produced. If the hypertrophied thyroid gland in Graves' disease be due to a compensatory process, the removal of the gland would hardly seem rational; but until we know more regarding its etiology and primary pathologic changes, excision is the best means of treatment at our disposal.

THE DIAGNOSIS AND TREATMENT OF SINUS THROMBOSIS.*

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Since 1880, when Zanzf of Prague first operated on a thrombosed lateral sinus, considerable interest has been manifested by the profession, especially otologists, concerning thrombosis of the intracranial sinuses. The sinuses most likely to become affected are the sigmoid and lateral sinuses, the jugular bulb, the superior and inferior petrosal and the cavernous sinuses. From the above channels the thrombus may extend into the internal jugular vein as far as the innominate, into the ophthalmic veins from the cavernous sinus; posteriorly to the torcular, or may even spread to the lateral sinus of the opposite side.

Although the thrombus may be due to an infection carried inwardly from an injury to an external part of the head, and to the marasmus of old age or malnutrition, the chief cause lies in a

suppuration within some part of the temporal bone. Such suppuration may be acute or chronic. When resulting from the acute form, the transmission of septic material from the focus within the temporal bone to the blood stream of the vein, the path of infection is through the intercommunicating blood or lymph channels, whereas in chronic cases of mastoid disease the pathogenic material from the mastoid usually comes into direct contact with the sinus wall, the osseous tissue lying between the original focus of suppuration and the vein having been first destroyed by necrotic processes. In many cases of chronic discharging ears there is formed first in the attic of the middle ear, and later by extension to the mastoid antrum, that curious collection of material known as cholesteatoma. Cases of this kind are always favorable ones for the sinus infection and sinus thrombosis. The presence of a cholesteatome in the mastoid antrum causes the breaking down and removal of the surrounding bone to such an extent that the antrum is thereby several times enlarged, and as a result of the loss of osseous structure, the dura mater may be exposed above, or the wall of the sigmoid knee may be laid bare posteriorly. In either case infection of the intracranial contents may follow, resulting in meningitis, brain abscess or lateral sinus thrombosis.

A predisposing cause of sinus thrombosis, and one to which I have on another occasion called the attention of the profession,¹ is due to the formation and arrangement of the pneumatic spaces of the temporal bone. Thus one temporal bone may contain but few cells, and these may be separated from the sinus by thick and eburnated bone, while another temporal bone may contain numerous cells which are so located that they extend along the sinus for one or more inches, and will sometimes halfway surround the vessel. In any individual having a temporal bone with cells like the latter, it is not difficult to understand the ease with which, in case of mastoid suppuration, the pathogenic material could find its way into the vessel where infection would speedily follow.

The symptoms of sinus infection and thrombosis are of practical interest to every physician. Any case of either acute or chronic discharging ear, whether in child or adult, is one in which sinus thrombosis may possibly follow. A discharging ear is, therefore, the chief key to unlocking many a difficult problem relating to an otherwise meaningless chain of ugly symptoms.

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

1. Barnhill and Wales' Modern Otology. W. B. Saunders & Co., 1907.

The story of sinus thrombosis may be briefly stated as follows: A running ear, which has possibly never been considered more than the most trifling annoyance: to this is added at some indefinite period of its progress a chill or chilly sensation, a rapid rise of temperature, a sudden fall of the fever, and a profuse sweat. In other words, a septic state has been added to the aural discharge, which for many years, perhaps, has been thought of no importance. Such a septic condition may, and often is, not in any way associated with the discharging ear by the physician in charge, or by those having most intimate knowledge of the patient. Indeed the patient may deny that the ear has discharged any for the past several months, and this may be true in so far as the appearance of any purulent outflow at the external meatus is concerned. A careful examination of the fundus of the ear by means of reflected light would, however, reveal the fact in such cases that a discharge had been present in small amount, that it had dried into a crust, which completely covered the perforation in the drum membrane, and thus had blocked the further outflow of pus. Hence the mere fact that an ear has not discharged for several weeks or months is no indication that the ear is not primarily responsible for the septic condition found in a given patient. On the other hand, the history of a previous discharge which has ceased may be, and sometimes is, responsible for the spread of the pyogenic infection to the sinus, for the reason, as just stated, that dried crusts have hindered the drainage to an extent that has driven the pus into new directions.

Thrombosis of the sigmoid sinus occurs rarely in cases where no discharge whatever has at any time occurred from the external auditory meatus, and when no perforation is present in the drum-membrane. In instances like this the infection has reached the mastoid antrum and cells without all the usual phenomena of middle ear suppuration.

It would be impossible in this short paper to narrate all the symptoms that may be present in sinus thrombosis. The chief one, as already stated, is a condition of sepsis. The temperature rises from normal to 103° - 4° or 6° F, and suddenly drops to the normal or near the normal. This rise and decline does not occur with the regularity of malaria. Indeed it may occur more than once in twenty-four hours. Profuse and exhaustive sweating occurs, as a rule, during the period of declining temperature.

A marked chill, or at least chilly sensations, occurs in most cases at some time during the progress of the disease, although many cases of

sinus thrombosis have been reported in which no chill was present at any time. It is my belief that if careful inquiry and frequent examination of any case be made that it will be found that a chill or coldness of the surface in some degree will usually be present.

Pain may or may not exist on the affected side of the head. It is often not present unless there is an acute mastoiditis accompanying the disease. There is often no swelling of any part, no stiffness of the muscles of the head and neck, and indeed no external evidence of anything going wrong. This is oftenest true of cases following chronic mastoid suppuration. Later in the disease, when the internal jugular vein may be involved, the cervical lymphatics may be infected, in which event the neck is stiff and feels hard. In the earlier stages of any case, the stages when it should usually be possible to make a positive diagnosis, no such formations as a "sausage cake" in the neck, as formerly described, should ever be expected. In the late stages general infection may occur. Particles of the broken down clot are carried into the general blood stream and thence to the lung where septic pneumonia is set up. A harassing cough and disturbed breathing, together with physical signs distinctive of pneumonia will then be present. Should the patient withstand all this, septic emboli are sooner or later likely to be carried from the lungs to the distant parts of the body like the arms and legs, where multiple abscesses are formed.

Unimpaired intelligence of the patient is one of the distinctive features of the affection. Throughout the trying ordeals incident to the disease the patient is usually rational and the mind unusually active. I have known patients during the remission of the temperature to desire to read or write, and if permitted to do so would often show surprising mentality.

Ocular changes occur in from 25 to 50 per cent. of cases, and, therefore, where possible, the fundus should be examined frequently for such evidence. Disturbances of the eye grounds may occur in other intracranial affections, as brain tumor, brain abscess, etc., and hence when present in suspected thrombosis such symptoms form only a help, but not a certainty as to diagnosis. Nystagmus and double vision are also present in perhaps one-third of all cases. Sinus thrombosis being a disease due to infection, the general symptoms will, of course, resemble those occurring from infection due to other causes. The disease may be mistaken for malaria, typhoid fever, pneumonia, and the disturbances due to faulty digestion of food. In some of the typical

cases of sinus thrombosis the symptoms may resemble one or more of the above diseases so closely that the diagnostician will find it necessary to call to his aid every artifice known, and then may possibly find that he must await the further development of additional evidence.

Bezold, in harmony with most writers, states that few cases of thrombophlebitis get well, unless the condition is managed properly, and surgically. While it is believed by all observers that cases do occasionally get well without operation such an outcome can not be expected in the simplest cases, and then not unless the original focus of infection in the temporal bone be thoroughly eradicated by means of a mastoid operation. Procrastination, and the use of poultices and other external applications, are favorable to a high mortality.

The treatment is nearly always surgical. While waiting, as is often necessary and wise, for absolute evidence upon which to base a definite diagnosis, almost any method of treatment may be followed which will make the patient most comfortable. Since the vast majority of all cases of this disease is due to the presence of a mastoid suppuration, it is permissible, and, I think, highly advisable in most cases of strongly suspected sinus thrombosis, to do a complete mastoid exenteration as a preliminary necessity as well as a proper aid to diagnosis. At the time of this operation all diseased tissue which lies in the direction of the sinus should be removed, and if necessary to be certain, it is proper at this time to remove the bone and uncover the wall of the sinus for one and one-half or two inches. This will allow of an easy and reliable inspection of the sinus, and it may then be determined whether the sinus is or is not thrombosed. In uncovering the sinus the operator may find a perisinous abscess, or the sinus may be covered with thick unhealthy granulation tissue. If such extra-sinus disease is found as has just been described, and the sinus itself looks and feels to the touch, rather healthy, the safest procedure is to disinfect the mastoid wound as perfectly as possible, pack the same loosely with iodoform gauze, and await the development of the next few days. During the succeeding two or three days every feature of the progress of the disease should be noted, and if marked and satisfactory change in the condition does not take place the patient should again be anesthetized and the sigmoid sinus should be opened and examined in each direction. Any clot or collection of pus should be removed, and when thought advisable the internal jugular vein should be ligated in the neck and the diseased part resected.

Many of the procedures connected with the surgery of the sinuses are still in dispute, and I shall not enter into their discussion. The aim of all operators is to first clear out of the vein or veins all the septic material that is present, and then, if thought best, to prevent by means of ligation of the internal jugular, the entrance of further sepsis into the general circulation. In all cases I believe it is not wise to undertake this class of surgery without the best reason, for reckless operating with the cranium, especially if it involves opening one or more of the large blood streams, is undoubtedly a procedure that is dangerous to life. But when the surgeon is assured by a careful study of all the symptoms present that some accessible sinus is thrombosed he is entirely justified in opening the same and ridding the patient of his fatal malady. The results of the operation when performed early and skillfully are favorable in from one-third to one-half of all cases.

DISCUSSION.

Dr. J. J. Kyle, Indianapolis: The doctor has emphasized a very important point, and that is the early diagnosis of sinus thrombosis. I have had five cases of sinus thrombosis that died subsequent to operative procedures, and all came under observation when they were practically moribund. One case in the city hospital had been treated four or five days for suspected typhoid, but the Widal and diazo tests were negative, and the patient was in collapse when I was called. It was reported that the lungs were in very good condition, but at the postmortem the second day after the operation both pleural cavities were found half filled with muco-pus, and there were abscesses throughout the lungs, kidneys and spleen. I remember another case treated for a number of weeks for pneumonia. She had metastatic pneumonia, but the ear symptoms had been altogether overlooked. It is very important in ear trouble, wherever you have a sudden chilling of the body, or a distinct rigor followed by a rise of temperature, to suspect sinus thrombosis or an osteomyelitis or extra-dural abscess, and in either case it is necessary to make exploration. The danger of incision in the mastoid and dura is little compared with the danger of suppuration in or about the sinus.

Dr. George F. Keiper, Lafayette: I wish to emphasize a point in diagnosis in these cases, and that is the frequent taking of the temperature. In fact, it is the only way you can tell sometimes whether you have sinus thrombosis or not. Where we have a temperature that fluctuates markedly and suddenly we may be pretty

certain of sinus involvement. I like the classification into stages, as given by MacCuen in his classic work on Diseases of the Brain and Spinal Cord. MacCuen divides sinus thrombosis into three stages, the first beginning with the formation of the clot, the intima being involved, where perhaps nothing has yet entered the circulation to give any clue in the way of temperature, few chills or rigors occurring at that time. The temperature should be taken every three hours, so as not to miss the fine points the chart would reveal to us. The second stage is where the clot has formed in the sinus and more septic material is entering the circulation marked by more severe symptoms. And the third stage where the clot has fully formed and broken down and suppurating, entering the circulation, revealing the marked temperature changes shown on the chart. The question of the ligation of the jugular vein in these cases has probably been settled by the statistics of Perrin, which show that when the jugular vein is ligated septic matter is prevented from getting into the circulation and producing pneumonia, and the percentage of fatalities is improved about 18 per cent., so that ligation of the vein is a desirable procedure.

Dr. D. W. Stevenson, Richmond: I operated a short time ago on a case of sinus thrombosis in which the temperature reached 106.5, and there was very severe inflammation of the optic nerves of both eyes. I may say that in cases with this high range of temperature, if the patient lives there will usually be some atrophy of the optic nerves.

The steps in the operation, as emphasized by Dr. Barnhill, are two: the exenteration of the mastoid, which ought always to be done and done early; and second, the ligation of the jugular. But about this latter there is some doubt. In my case I did not tie the jugular. It was a case of severe infection and was so treated. I gave large doses of strontium salicylate, 100 grains a day, and also mercury almost to salivation, and I believe the life of this patient was saved by this rather bold treatment with these internal antiseptics. I believe the time will come when ligation of the jugular will not be performed so often, and we will depend more on internal antiseptics. The high temperature records in these cases are interesting. A case in Boston broke five thermometers that registered 110 and over, and yet the patient is living. It seems that certain centers in the brain are affected that give this high temperature found in no other diseases.

Dr. K. K. Wheelock, Fort Wayne: There is too much temporizing on the part of the general practitioner, as well as the specialist, in handling

suspicious ear cases. Within the past year we have lost two valuable young lives by the dilatoriness in the diagnosis on the part of the general practitioner, although after it was recognized every resource was brought to bear to save the children's lives. This should not be, and while I appreciate that the general practitioner has a lot to contend with, yet if he takes the responsibility of treating suppurative ear cases he must take the full responsibility. In regard to treatment, as shown by the cases collected by Tupper, the question is not so much how you operate as when you operate. If we operate within the first week after the development of the temperature shown by Dr. Keiper, we will save 75 per cent. of them; after that time you will lose 62 per cent. Therefore, it is a question of the early recognition of these cases and of a complete and radical operation, opening and exploring the sinus, and if you have a septic sinus open it and cause a free flow of good blood where bad blood exists. Simple tying of the jugular I do not think is the best method. Alexander's method I think is a better one—cutting off the jugular and tying, of course, the distal and leaving the proximal end open in the wound. I have made it a rule in mastoid operations, in view of my experience within the past year, to expose the lateral sinus to the extent of an inch or an inch and a half, and it is entirely within our province where there is the least suspicion of infection to examine the lateral sinus.

Dr. J. F. Barnhill, Indianapolis (closing): The object of the paper was to bring before you for the first time, as I believe, the subject of sinus thrombosis, and it was my aim to dwell upon the diagnosis. I would like to emphasize the points brought out in the paper. First, it is a common disease. Second, it ought to be recognized by any one who practices medicine. Any case of suppurative ear in which there is an unusual rise of temperature ought to call attention to something more than a simple mastoiditis, in which latter trouble it is rare to find a temperature more than 101, and if higher than that, and especially if it shows the zigzag course shown in Dr. Keiper's diagram, we ought to suspect that it is complicated by some general disease or by some intracranial complication of the ear disease. Now, as to diagnosis, it might be, in the first place, malaria. Examine the blood and find the plasmodium. You may find it is typhoid by the blood examination. You may find a central pneumonia, a latent pneumonia, in which it might be difficult to decide whether it is the ear or the lung. I had one case in a child in which it was difficult to diagnose. We held

the case for a week and then found it was due to a difficulty of digestion. I want to emphasize what every one has said. Have the nurse examine the hands and feet and body frequently, because a little chill would be as important as a decided rigor. If you have a discharging ear, a possible mastoiditis, a little coldness of the extremities, a septic temperature, you ought always to think of the disease which we have been discussing.

THE PREVENTION OF VENEREAL DISEASES.*

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INDIANAPOLIS, IND.

It is our intention to deal only with one phase of this subject: The responsibility of the physician in the prevention of venereal diseases, with special reference to gonorrhea. In considering the subject from this standpoint we can not overlook the fact that the entire responsibility rests upon the physician just as the educational campaign against tuberculosis, begun and pushed entirely by physicians, has become a duty. We will not consider those benefits that might arise only from the action of law makers, involving deep sociologic problems, such as the control of prostitution, moral prophylaxis and the regulation of marriage.

It is a self evident fact that if every person suffering from a venereal disease were cured without having transmitted the affection to another the disease would soon be stamped out. What conditions prevent an approach of this desideratum, and what is the duty of the physician in bringing them to an end? There are two ways whereby proper control would be preventive: 1. The control of the uninfected individual, preventing his contracting a prevalent infection. 2. The control of the infected individual, preventing his communicating the disease. Keogh asserts that the heated discussions that have arisen to obscure the question depend more upon differences regarding the nature and morality of legislative control of prostitution than upon the denial of the scientific fact that the spread of an infectious disease, venereal or otherwise, can be and is limited by such measures as notification, isolation and adequate treatment.

There has always been such a widespread prejudice against any dissemination of knowl-

edge along these lines that lay information is very limited and usually erroneous. A campaign of enlightenment must be originated, sustained and prosecuted by the physicians of this country. With the social problem unsolved, our hope lies in education. As a means of reaching everyone at the proper time, in life nothing offers opportunities equal to the public schools. This has been recognized by the zealous workers against tobacco and alcohol, who have succeeded in making it compulsory that every child have placed before it exaggerated pictures showing the baneful effects of these drugs. This suitable season to reach the mind when it is most impressionable should not be disregarded. With proper activity on the part of the medical profession some of the time now devoted to teaching scientific temperance might be used for instruction in scientific physiology and special pathology. Of course there would be difficulties hard to surmount in teaching youths, as education in regard to venereal diseases presupposes a certain amount of knowledge concerning sexual matters, or would require accompanying light on these subjects. The fear of thus injuring the minds of children may be dismissed, for a subject properly presented in the light of science loses vulgarity. By all means, however, the contamination of our young men and of our young women should not be as it is now, the tainting of the innocent. Why should a picture of a haggard user of whiskey and tobacco be shown a school boy when he has never heard of the terrible results of diseases which await the indulgence of strong, natural appetites? Why should a diseased lung be charted to the boy and girl who are not to be taught the anatomy and physiology of the organs of generation and will probably not be able, even as adults, to connect cause and effect when the surgeon removes the wives' pus tubes. I have yet to find a case of initial gonorrheal infection that the patient did not bewail his ignorance in regard to the severity of the disease. His state of mind can usually be likened to that of a man who, thinking he had exposed himself to vari-cella, had developed a malignant case of variola.

Education must be begun early. It is customary now to confine efforts along this line to gatherings of adults and, as a rule, in such a technical manner that little good is done. Recently a member of the Young Men's Christian Association came to me complaining bitterly because the specialist who had lectured to the society had failed to cure him of an acute gonorrhea in ten days. There was evidently a misunderstanding in that case. The young man had utterly failed to grasp the most important facts taught by the

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physician. Thus is shown the futility of efforts toward educating the masses as they are usually directed to-day. Education in regard to the importance of venereal diseases must be begun at an age when, acting as a control of the uninfected individual, it will serve to prevent his contracting disease. We have always "locked the door after the horse is stolen."

It is in the treatment and control of the infected individual that we need the greatest awakening. The burden of this work rests entirely upon our shoulders. There are practically no cases of syphilis that do not come under the care of a physician. A large per cent. of cases of gonorrhea are at some time in the physician's care, though a considerable number seek restoration by means of patent medicines, druggists' treatment, and favorite prescriptions. The physician can not be held accountable for those individuals who do not seek his advice, but the medical profession is to blame for not having, by education, given the patient sufficient fear of this malady before it was contracted. In our cities there are many drug clerks with a clientele of venereal patients, and several druggists in Indianapolis boast a sub-rosa reputation as specialists in venereal diseases. One of these informed me that he had, at one time, as many as twenty cases of gonorrhea under treatment. The worst feature of this is that the druggists as well as the patients believe in the cure, and in their ignorance consider themselves able to judge of the absence or presence of this dread disease. Why do these sufferers go to the druggists and to the patent medicine shelves? Invariably, I have found it to be either a matter of expediency or a financial reason, or both. The disposition of the average American is to have the best for his own comfort and health, and I have concluded that he usually seeks the cheaper methods because he thinks them just as good as the physician's treatment. Thus we are brought back to the first premise that lack of education regarding the nature and importance of venereal affections is the principle cause of trouble.

Though the number who treat themselves or are maltreated by druggists is great, they alone do not account for the spread of disease. Where did the 95 per cent. of gonorrheal pus tubes and pelvic abscesses that Joseph Price has operated get their infections? Not from among the careless and those too poor to pay for treatment. Careful investigation will show that most of the chains of infection at some time passed through a physician's hands and should have been broken. This brings us to an accusation of the profession at large for a great crime of omission.

It is a fact that hardly one case of gonorrhea in Indiana out of one hundred is properly diagnosed, properly treated, and properly dismissed, aside from the cases of a very few enthusiasts. Gentlemen, the import of that statement can hardly be appreciated until you think of the hundreds of abdominal sections made yearly because the male focus is not cured of his infection. By carelessly dismissing him uncured, the physician becomes a party to the crime against society, the spread of gonorrhea. It is unnecessary to recount all the blasting results of this disease. The cases of male and female sterility, with the consequent loss to the state, the 50 per cent. of blindness in children, the suffering in later life from stricture, and the many aches and pains that gonorrheic woman is a victim of are all familiar to you.

You will bear with me if I go into the subject of treatment very carefully, for therein lies the foundation of the evil which we seek to remedy. The physician accepts a patient suffering with gonorrhea and not appreciating the importance of the disease himself, he causes the patient to consider it as of little consequence. He makes no microscopic examination in the beginning and he makes none during the course of the disease. Many times he does not even make a physical examination, but merely takes the patient's statement. He regards the disease as unclean and is willing to quit treatment whenever the profuse discharge is checked and the patient satisfied. The result is that nine-tenths of these cases, feeling unmarred, become active centers of distribution. At a table conversation during a recent professional gathering I was surprised to hear a confrère give a prescription which he declared would stop a urethral discharge in one week. He slyly added that with the discharge stopped the doctor could collect his fee and not be troubled further. To my disgust another young physician took out his note book and eagerly copied the prescription with great care of detail. Is it any wonder that under such conditions people think that gonorrhea is a trivial disease, often "no worse than a bad cold," and that it is easily and quickly cured? Naturally it is not surprising that they are willing to give only a small fee for short service, consisting of a bottle of medicine with advice. Nor are they to be blamed for considering themselves sound when they have been assured by the physician, anxious to be rid of such work, that a slight intermittent discharge is only a sequel, a weakness.

To recapitulate: for years the physician has regarded gonorrhea lightly. The people, there-

fore, regard it lightly. The physician has done small work and has asked small pay, and the people have come to expect the same. The people have been allowed to believe a quick cure possible and a poor cure safe. Upon these misconceptions depend the other abuses enumerated, drug store treatment, as well as self-treatment and patent medicines. Physicians, the blame for this deplorable condition lies at our doors.

Before we can expect a better understanding by the laity we must come to a proper conclusion among ourselves, then the people, as they always do, will meet us. Have we not taught them to accept operation for appendicitis and many other lessons far more difficult to learn than this one? We must remember that gonorrhea is a microbic disease with its bacteriology placed upon a firm, practical basis. The treatment should be conducted with the aid of microscopic examinations, and above all the cure must be exactly and scientifically proven with the most searching microscopic examination of debris from the prostate, seminal vesicles, posterior and anterior urethra. This does not necessarily mean the ownership of an expensive apparatus, as the state has wisely made provision for the examination of specimens both in the state laboratory at the capital and at Indiana University. It does mean, however, careful and untiring labor.

But you say we can not afford to do all that for a mere pittance. I answer: Patients must be taught to pay fees commensurate with the treatment. I can say on the authority of others and from my own experience that the people are ready for this education and will pay for the labor if we are worthy of our hire. Personally, I would rather undertake an abdominal section than a cure of acute gonorrhea. The laparotomy does not require as much time and labor and puts no greater demand on skill. Every case of gonorrhea should cost the sufferer from fifty to one hundred dollars, but he should get full value in proper treatment and a safe cure. For the class of patients who can not afford such expensive private treatment, the state should provide hospitals or dispensaries. Why should the tuberculous subject be cared for to prevent the spread of disease and subsequent loss to the state, and not the victims of this malignant affection? Venereal patients are not only neglected, but they are discriminated against. There is not a hospital in the state of Indiana that will receive a sufferer from gonorrhea, as such. While resident physician in the largest general hospital in the state, the Indianapolis City Hospital, I did not treat a single case of

gonorrheal urethritis, except where the patient had been admitted on account of some grave complication. In charge of a free clinic later, I found these patients coming in such numbers that they had to be turned away and only the most interesting, from a clinical standpoint, received for treatment.

In the light of our present knowledge, the successful treatment of gonorrhea in the male calls for adequate physical examination and proper medication. Recently I was told by a country physician that what was needed was some simple successful plan of treatment which would meet the convenience of the physician, and especially of his rural patient. Something that would not make frequent office visits necessary and thus expose the patient to an enquiring neighborhood. Unfortunately this is not now available. The present methods of treatment, while satisfactory in their results, are often tedious and require personal attention for a considerable period of time.

Drug makers have flooded the market with remedies, each lauded as a specific for gonorrhea. Some of these are better than the old remedies, but all the good derived from them has been vastly outweighed by the great harm done in fostering the idea of a specific and encouraging a false sense of security in careless treatment. What we need most is not better drugs, but better methods in the application of those we have. The profession, as well as the laity, can not relinquish the idea that in one remedy we may discover the long sought sure cure. Soon after the popularizing of a new silver compound among the profession, we find a certain class of patients, on their own counsel, injecting their anterior urethra with this magic drug vaguely expecting to cure a discharge which originates from a seminal vesiculitis, prostatitis or posterior urethritis.

The science of genito-urinary surgery has been neglected and even to-day the average medical student looks upon the teacher and practitioner of this specialty as a person defiled. Quite recently I was told by a physician who graduated from a large eastern medical school that during his time in college he did not see a single case of urethritis. Upon visiting the same school later I found one man in the department devoted to this class of work, and he seemed half-hearted and apologetic about it. The surgeons and gynecologists in this school were not lacking in numbers nor in ability.

Before this society three years ago the writer advocated legal control of prostitution. This met with unanimous disapproval. A short time

after, through a change of administration in Indianapolis, we were able to see the effects of control. During the administration spoken of a policy was pursued consisting of segregation of regular prostitutes and almost complete abolishment of clandestine prostitution. The result, as verified by the observation of several physicians, was a very appreciable reduction in the number of acute cases of venereal infection during that time. It seems, however, that the spread of venereal diseases can not be successfully attacked from this quarter just now, and it devolves upon the physicians of this country to educate the uninfected that they may protect themselves and by thorough work to prevent as far as possible the communication of infections.

DISCUSSION.

Dr. Harvey A. Moore, Indianapolis: The subject of venereal infection has been ably presented by Dr. Link, and there is little to add at this time save to urge a greater radicalism and a more unanimous awakening of the reformative impulse in the medical profession at large.

I heartily agree with the speaker that the fundamental responsibility for the prevention of venereal disease rests upon the physician, and I believe that the first move is to educate the public. It is true that there is a large element in the medical profession that needs this education almost as badly as does the suffering public, but the weakness in this case is from indifference or direct antagonism to the subject, and will therefore only fall before the disgust of an educated population.

We must, therefore, gather together the energies of the men who do appreciate the seriousness and the immediate dangers of this situation, and bend our combined faculties in the effort to give the public the needed reform. It is true that we must tolerate the limitations of our private practices and expend our greatest energies in therapy for the present, but we must not lose sight of the fact that a more radical move must be made in the not far distant future.

At the present rate of gain of the venereal plagues the individual cases cured will in no way equal the number of new infections. Our efforts, then, are not eliminative, but only modifying, and we can not be satisfied to merely moderate this monster. It must be eradicated.

Education is the solution; it is the quenching fluid that will forever kill the flames of this sacrificial pyre; it is the ultimate materialization of the fabled elixir of life. Every evil is based upon the absence of that great and only uplifting influence which we call knowledge.

It must not be forgotten, however, that knowledge is not acquired in a night, in a decade, or even in a lifetime. Before knowledge can be properly assimilated there must be an up-building of the finer tissues through careful breeding and a continuation of the educational processes year after year and generation after generation. Thus, it is easily seen, time is the greatest handicap to our movement. Will the plagues undermine and cause the fall of the efforts before a sufficient foothold is found to make our offensive and defensive tactics sufficiently effective to turn the tide?

An affirmative to this question would surely be a black conclusion, but the position would be untenable. Confidence in mankind, in his universal and inevitable impulse to progress, forbids.

But what will be the methods by which advance is made? This is the question which most greatly perplexes us at this time. It would be folly to attempt to eliminate the venereal plagues by such methods as were used against alcoholism a few years ago. Prohibition teachings probably made as many, if not more, drunkards than they cured, for prohibition, as a class, told lies and not truth about alcohol. Prohibition revelled in exaggeration, and exaggeration is provocative and not preventative. We, in our campaign, must not fall into this error.

We must make truth our motto and our battle-cry, and then live up to it. Teach the public the truth about venereal diseases, and when all the better minds have grasped it we may be able to get an enlightened legislature and thence laws and law enforcement which will lend an impetus to our effort.

When we have reached a point where laws can be made to support the truth, we will have the plagues throttled and will be able to slowly choke them to death. When venereal diseases are placed in the same legal category with smallpox, yellow fever, bubonic plague, cholera, leprosy, and all other diseases which are isolated and published, they will disappear.

"Why," I have heard men ask, "do not these other diseases disappear before isolation and publicity?—and if they do not, why should syphilis and gonorrhea?"

The question is an easy one to answer. Smallpox and the other diseases in the same jurisdiction are the diseases of misfortune only. Syphilis and gonorrhea are the diseases of shame. Shame is the child of crime, and the most masterful enemy of that foul parent is the great white light of publicity.

The conquest of the venereal diseases must not be undertaken merely as a moral question. They must be combated finally on the broad grounds of economy, public and individual. Economy is the governing principle of civilization, and it surely crushes out the wasting elements, sometimes slowly, but always with the certainty with which it is now crushing out the ravaging force of alcohol.

GONORRHEAL OPHTHALMIA.*

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There are three diseases of the eye that the general practitioner should be able to recognize unmistakably; these are iritis, glaucoma and gonorrheal ophthalmia. The latter disease is dreaded by the physician when he feels the responsibility of its ultimate results.

The disease is known as gonorrheal ophthalmia, gonorrheal conjunctivitis, purulent ophthalmia, ophthalmo-blennorrhea, ophthalmia neonatorum, etc. This varied nomenclature must be somewhat confusing to many practitioners.

White makes a distinction between gonorrheal conjunctivitis and gonorrheal ophthalmia; the former being an involvement of the conjunctiva only and caused by direct infection; while the latter includes the deeper structures of the eye and is of metastatic origin, can only occur in persons having urethritis, usually accompanied with arthritis and affects both eyes. From custom, all cases called ophthalmia neonatorum are supposed to be gonorrheal; but Arlt in an examination microscopically, of the pus in seventeen cases of blennorrhea neonatorum, found the gonococcus of Neisser in only nine, and Houpt, in sixty-two cases of suppuration of the conjunctiva in the new born, found that in seventeen cases the gonococcus was not present. I have seen several cases myself which resembled gonorrheal infection, but on microscopical examination the gonococcus could not be found. For this reason it seems to me that the true condition should be specified by the term gonorrheal.

The disease is caused by direct or indirect contact, or by metastasis. In the infant the former mode is more common, while the adult is subject to the two latter means of infection. Metastasis in the adult may be due to a preceding, dormant or co-existing active urethritis, often accompanied by arthritis. By this latter mode of in-

fection the deep structures of the eye are involved. The adult is not alone the subject of metastasis in gonorrheal infection. As the organisms travel the lymphatics from primary urethral infection in the adult, so they do in the infant from primary conjunctival infection. Dahlstrom reports fifteen cases of infection of the joints with ophthalmia neonatorum. Stevens has reported a fatal case of septicemia due to ophthalmia neonatorum; after the eleventh day the joint affection became noticeable: the infant succumbed to endocarditis seventeen days after the beginning of the attack of ophthalmia.

Many cases of intrauterine infection have been reported with accompanying theories. Some claim the infection to take place through a prematurely ruptured membrane; others to the passage of the coccus through the membrane itself. It may be possible that these cases are affected through the maternal circulation: the current is so strong through the umbilical cord, the organisms are pushed along the course of the vessels; but at birth the circulation is much more feeble and the organisms confined within the infant body find lodgment at some point of election and manifest their pathological influence in due time. This, of course, is only theoretical, but it seems feasible, particularly in those cases where other parts than the eye are involved.

We know that in adults gonococci do travel in the blood or lymph channels, or both, and develop in remote parts, or toxins produced, excite inflammation of the deep structures, such as those of the eye. I have no doubt that many cases of so-called "rheumatic iritis" are caused by gonorrhea in this manner. I recall cases in my own practice in which the diagnosis was questionable. Galezowski calls attention to the metastatic affections of the iris, chorioid and optic nerve in gonorrhea, and ascribes their development "to the virulence of the bacteria and the low general resistance to the individual. Generalization of the infecting virus generally accompanies an increased production of toxins."

There is a wide difference in the degree of virulence of the gonococcus. I have seen infants' eyes filled with pus and the fields of the microscope containing many cells enclosing numerous gonococci, while the pathological conditions were comparatively slight and confined to the conjunctiva; other cases were extreme in the degree of pathological involvement, while the amount of secretion was slight and the bacteria so few they were difficult to find. This shows that the attenuation of the organism is not, in all cases, the most favorable indication.

The gonococcus affects the whole conjunctival surface but seems to have choice points of selec-

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tion, principally the retrotarsal folds. It burrows itself beneath the epithelium, and for this reason is more difficult to control in some cases. Probably the pathology of the conjunctiva could not be more briefly and better stated than by quoting Schridde, who "found the ocular conjunctiva fairly intact in an infant who died while suffering with blennorrhoea. The retro-tarsal folds and the palpebral conjunctiva were very foul and permeated with neutrophile leucocytes. The epithelium was loosened in places, and here and there were particularly large numbers of leucocytes and gonococci. These lay in bands, free between the cells in the sub-epithelial connective tissue, and only on the surface were they enclosed in the leucocytes. In places where the affection had progressed further there were ulcers, total destruction of the epithelium of microscopic size from the bases of which granulation tissue was springing."

The clinical picture of gonorrheal ophthalmia varies according to the stage of the disease and the intensity of the inflammation—from a slight injection of the conjunctiva without secretion to a severe inflammation accompanied by a secretion varying from a muco-purulent character to that of a thick, creamy greenish-yellow pus and profound edema of the lids and conjunctiva.

When confronted with a case, the question arises, what have we to deal with, a case of true gonorrheal ophthalmia or a purulent conjunctivitis from other cause? I recently had a case which was diagnosed gonorrheal conjunctivitis by the attending physician; it looked like such a case in every particular; I could find no organisms by smear examination, but a serum culture showed a luxuriant growth of colonies which proved to be diplo-bacilli. It is not an easy matter to make an offhand diagnosis in such cases, especially when the history is negative. We are not justified in accusing a patient of having gonorrheal ophthalmia unless we are positive that such is the fact by bacteriological examination. Therefore smear examinations should be made in every case of purulent ophthalmia, and if diplo-bacilli of the biscuit variety are seen the diagnosis should be verified by Gram's method, particularly in such cases where medicolegal questions are apt to be involved; as other cocci resembling gonococci may be present, and if the smear be not properly made, these may appear to be within the cell when in reality they are above or beneath it. Therefore it is safer to make several smears, using Gram's method with some of them at least. If a physician has not a microscope, and many of them have not, smears should be made and sent to the State Board of Health for diagnosis, and in the meantime the physician should confiden-

tially take it for granted that gonorrheal ophthalmia exists and treat it as such, as no harm can result from the treatment and it is always best to be on the safe side. As this disease, neglected, is the cause of such a large percentage of blindness, it is criminal practice not to put forth every effort by watchfulness, care and treatment with every case. We can not always consider the family or its standing in society, for the gonococcus is no respecter of persons and the practitioner may be confronted with this organism where he least suspects it.

I presume that no one knows the percentage of gonorrheal ophthalmia accompanying urethritis in the adult—which must be small—nor the percentage of infants which have escaped eye infection when favorable conditions prevailed. Herf finds that of infants born in institutions 0.2 per cent. have ophthalmia, and he estimates that in private practice 0.7 to 0.8 per cent. are infected. In an experience with nearly five hundred cases of labor in sixteen years of general practice near the city of Boston I never had a case of gonorrheal ophthalmia in the infant. I do not know that the parents ever had gonorrhea, or, if they had, the absence of ophthalmia in these infants may have been due to the prophylactic measures used in cleansing the mothers previous to delivery and the personal care of the infants' eyes immediately after delivery. Even if gonorrhea exists in the mother I believe many infants escape infection by careful cleansing and other prophylaxis.

The report of the Committee of the American Medical Association on Ophthalmia Neonatorum shows that in the investigation of the schools for the blind, where the records were exact in ten schools, representing eight states and the province of Ontario, for the fall admissions of 1907, that 25.21 per cent. were needlessly blind. It was difficult for this committee to get an accurate percentage of blindness caused by ophthalmia neonatorum, because of the inexact data, but from the census taken by the Commission of the blind in New York and Massachusetts, in 1906, it was estimated according to the age when vision was lost, that nearly one-half the whole number became blind as a result of ophthalmia neonatorum.

In Indiana there is no improvement over other states in this respect. Through the kindness of Mr. George Wilson, superintendent of the Indiana Institution for the Education of the Blind, I recently looked over the record of admissions to this school for a period of the past three fiscal years, and I found during that period that only one report of cause of blindness had been given as ophthalmia neonatorum. The number of new admissions for the three years past is 47, and

the number of which blindness occurred under eight months is 22; under three months 20, and under one month 15. The causes given were numerous, such as "unknown," "strong medicine," "birth mark," "bad treatment," "sickness," etc. It would be safe to say that if the real cause were known that all, or nearly all, of the twenty-two cases became blind as a result of ophthalmia neonatorum, as the percentage tallies favorably with the report of the committee above referred to. In one annual report for the year 1903-4, page 74, under age at which blindness occurred, 54 were classed as congenital and 29 during the first year, making 83 children who became blind under one year of age of a total of 132. Had the blindness of these 83 cases been prevented, as it might have been, by timely diagnosis and proper treatment, it would have saved the state for that year alone \$19,200.39, as the expense per capita was \$231.33.

The fact that there is no improvement in these conditions is shown by the admissions for the fall of 1907. Out of a total of fifteen admissions nine became blind under three weeks after birth, or 60 per cent. of the total. We should not go to foreign countries for statistics, but should study the conditions at home, and to lessen this large percentage of needlessly blind children the state should legislate compulsory prophylaxis. Many of the younger physicians of recent graduation become careless in this respect, and many of the older practitioners are not only careless but ignorant of the diagnostic measures and the therapeutic indications. The laity should also be instructed in plain language of the danger to their own eyes and to those of their infants while suffering with gonorrhea. Not until this is done and the conscience of the careless physician is awakened will the percentage of blind infants be lessened.

There seems to be no excuse now, with our knowledge of the cause and prevention of this disease, for it to occur in the infant in private practice, nor in institutions where women are confined. Whether we should drop into every infant's eye at birth a solution of silver nitrate, as is prescribed by law in some states, irrespective of existing conditions, is, it seems to me, an open question, one which the attending physician and the parents of the infant might modify. If a case can not be watched either by a competent nurse or the physician it is the most desirable thing to do; otherwise it seems needless to irritate the eyes with silver nitrate, especially when they have been cleansed with antiseptic solutions. To be wilfully negligent in suspected cases is criminal practice. To combat such negligence and the ignorance of midwives the state laws above

referred to in regard to the compulsory use of silver nitrate in the eyes of the new born were enacted. If a physician is not able to cope with gonorrheal ophthalmia as it is met with in his practice he should immediately place it in the hands of a specialist. The great danger is, such cases are often tampered with by untutored hands, and when they are placed under the care of the specialist the damage already done is often beyond repair.

In neglected cases the mother wonders why the infant does not open its eyes, and when they are opened, probably by the physician who has been called for that purpose, the lids are found to be stuck together, and when released, masses of creamy yellowish pus flows out, and much damage has probably already been done to the delicate corneal epithelium if ulceration has not actually taken place. Usually too few calls are made following labor cases. Every infant should be watched for the first week, at least, even if no apparent symptoms of eye trouble are present. When the physician leaves directions for the care of the eyes, in many cases, through carelessness and ignorance, the directions are not carried out. It is one thing to drop into the eye one of the silver salts and quite another thing to properly cleanse the eye. Even some trained nurses fail to appreciate the importance of this. I have in numerous instances found thick pus in the folds of the conjunctiva immediately after it was supposed to have been cleansed. This is one, if not the most important, indication in the treatment.

There has been much controversy during the past year in regard to the value of the proteid silver salts. Some have discarded them, claiming them to be practically inert, others continue to use them and claim them to be the best antiseptics for ophthalmic use, and these conflicting statements are from men of national repute. After reading a discussion on the treatment of purulent conjunctivitis in one of the leading medical journals a practitioner of note in Indianapolis told me that he was more at sea than ever in regard to the treatment. Because some one of large practice makes the assertion that a valued remedy is practically useless it is no reason, if in our hands it has served us well, that we should abandon it. We have in medicine, as well as in other departments of life's labor, to a certain degree, to work out our own salvation, and if our experience has taught us anything it is that we should cling to that which has proved itself of great value.

For my own part, in the treatment of these cases, I prefer argyrol in fresh solution of 50 to 25 per cent. strength, beginning with the 50 per cent. applied every half hour. This is dropped

into the eye and not applied with cotton on the end of a stick. In inexperienced hands the latter method is a dangerous one, as too much pressure is often used, causing the conjunctiva to bleed, and the cornea was in one instance scratched, when applied by a nurse, and an ugly ulcer was the result. If cotton is used, which all will agree is indispensable for cleansing the eye, the gentlest pressure should be exerted especially when the conjunctiva is edematous and bleeds easily by slight friction. I mould a small piece of cotton about the size of the end of the little finger, free it from loose fibers, dip it in an antiseptic solution, preferably a saturated boric acid solution, squeeze out the excess of fluid, flatten the cotton and apply the edge to the everted lids, when any secretion present will adhere to it. By a repetition of this procedure several times the eye can be entirely freed from pus, though it may take some time to do it well. It pays, however, to make a thorough cleansing in the first place, as the subsequent cleansings are much easier. After this I then drop in the 50 per cent. argyrol, let it remain a minute, and again cleanse the eye as before, as the argyrol coagulates any remaining particles of secretion which form in shreds; these are easily dislodged, while if allowed to remain they act as a foreign body and cause much discomfort. After the second cleansing more argyrol is dropped in and allowed to remain. This operation I repeat every half hour to every two, three or four hours, according to the severity of the case, and it has been sufficient in my hands, even when the cornea has been much involved.

In some cases of corneal ulceration compression is an excellent adjuvant to other treatment, but when the eye is bathed with gonorrheal pus, the corneal epithelium softened and abrasions occur, compression is by no means desirable; in fact, we wish to encourage the patient to keep the eye open as much as possible, in order to keep the conjunctiva from coming in contact with the cornea. Irritation naturally causes reflex spasm of the orbicularis and consequent pressure on the cornea. Silver nitrate will produce this result, while argyrol obviates this, practically causing no irritation if dropped in rather than rubbed in. If argyrol is inert as a bactericide, as some claim it to be, then the excellent results I have had have been due to frequent cleansings.

It is needless to say that when only one eye is involved the other eye should be bathed with argyrol, properly protected and watched; and if the patient is an infant, in addition to the above precautions, its arms should be bound to its sides and the child caused to lie on the side of the affected eye. Also, when severe complications exist, such as deep ulceration of the cornea, iritis,

etc., they should be met by proper adjunctive treatment.

I believe that cold applications are useless except in extreme edema of the lids. Hot applications for five minutes at a time every hour are more favorable when the cornea is involved.

As blindness from gonorrheal ophthalmia is estimated to be about 50 per cent. of the total number of blind, it seems to me that in all our experience in general or special work, there is nothing more gratifying than to know that we have saved one more of these unfortunates from the environments of a blind asylum, and there is nothing that pricks one's conscience more keenly than a knowledge of the fact that through his carelessness one more child has been committed to such an institution.

As an example of many cases treated by the foregoing method I will report three, and two of these collectively:

CASE 1.—A male infant ten days old. The eighth day the attending physician noticed that the infant had a discharge from both eyes. He called me to see the infant two days later and left it in my charge. I found both eyes literally filled with pus, and the right cornea had a central ulcer of considerable depth. The left cornea was clear. I spent fully fifteen minutes in cleaning the eyes and instructing the mother how to care for them. The cleansings were kept up every half hour day and night for forty-eight hours. After each cleansing a drop of 50 per cent. argyrol was dropped in each eye. I made several smears which showed many gonococci in every field. The secretion stopped almost magically, and in two days from the time I first saw it there was no secretion. The infant opened its eyes and looked about in the darkened room, much to the delight of the mother and welfare of the cornea. The cleansings and argyrol applications were lengthened in frequency. The ulcer took on a healthy look, became clean and gradually filled in. The argyrol was reduced in strength but was kept up to the end of the third week, when boric acid solution was substituted and a mild yellow oxid mercury ointment used t. i. d. to stimulate corneal repair, and now, about eighteen months since I first saw the infant, the corneal scar is faintly visible.

CASES 2 and 3.—Both men of foreign birth, and as neither spoke English we could get no intelligent history of the cases. When they came under my care at the City Hospital last year the four eyes were bathed in pus, and three were complicated with corneal ulceration and one with iritis. The pupil in this eye was very small and would not react to a strong solution of atropin. It was difficult to see it well on account of the cloudiness of the cornea, which was in places in a state of maceration and multiple ulceration.

The same treatment was used in these cases as in that of the infant. On my return visits for the first few days I noticed that pus was present each time. I admonished the nurse in attendance to exercise more care with the cleansings. This was better for a day or two afterwards, but one morning I saw the patients at an unusual hour. I was informed that the eyes had just been cleaned, but on personal examination I found thick shreds of pus in the conjunctival folds. My patience became exhausted and I demanded a special nurse, one who could give the patients her constant attention or the patients would be blind for life. After this I had no further trouble; the eyes were free from pus at each visit. In addition to the treatment used in Case 1, atropin and hot applications were used. These cases were obstinate at first, but in my opinion this was due to want of proper care. The patients were in the hospital altogether about six weeks, principally because they had no home nor any one to give them attention outside. Except for several scars over the site of the ulcers, the corneae gradually cleared up. The patient with the iritis was the worst case; the man was totally blind in this eye and nearly blind in the other eye when he entered the hospital, but when released he could count fingers at six feet with the better eye. I used yellow oxid of mercury ointment for the corneal complications as soon as they became clean.

Without going into the minute details of these cases, I will simply say that my object in reporting them is to show the efficiency of argyrol in full strength frequently applied and accompanied by proper cleanliness, even in severe and complicated cases.

DISCUSSION.

Dr. D. W. Stevenson, Richmond: I believe these are cases the general practitioner ought to turn over to some specialist. Even the specialists will have troubles enough in the severe cases and enough worry and responsibility. Then, again, the cases ought to be treated in a hospital, if possible, and I believe almost every specialist would be willing to go down in his own pocket and pay rather than see these little ones suffer blindness for life. It is only a matter of two or three days before the serious symptoms are over, and during this period a trained nurse should have charge. The treatment the doctor mentioned will cure 95 or 100 per cent. of these cases; but there are a few cases in which the nitrate of silver ought to be banked upon and applied effectually under the conditions of a surgical operation, with a good light and several assistants, and where the patient is controlled by wrapping with a shawl or sheet so that there can be absolutely no movement. If you use the nitrate in 10 per cent. solu-

tion and hold it on long enough you will get the effect of 100 grain solution, but I prefer to use the 100 grain solution, and I wouldn't care if it was 300. I would not be afraid to use it in my own eye or my children's eyes. I would also have present a simple salt solution and a boracic acid solution and then thoroughly wash off the superfluous nitrate, and I wouldn't care if a little of the strong solution remained in the cul-de-sac. In the Chicago Eye and Ear Infirmary, Dr. Montgomery was known for his successful treatment in these cases, and he never used less than 70 grains to the ounce. I saw him treat dozens of cases with no bad results to cornea or conjunctiva. This is a virulent germ and is often deep in the succulent tissue, and you want to reach some depth, and I believe in bad cases we should rely on the old reliable nitrate of silver, and you can go to bed and sleep with a free conscience, for you will probably save children from blindness.

Dr. J. L. Thompson, Indianapolis: There is a difference between the treatment of adults and infants. In adults, in spite of all you can do, you will lose many eyes. There is a stiffness of the lids, even though you cut the canthus, and this is important; but in infants, if you commence in time, you will not lose one in 500. I commenced with Dr. Williams a long time ago with the nitrate of silver, as the doctor mentioned. But unfortunately some physicians do not open the lids and you are called to the child some days afterward and there is ulceration of the cornea. If the doctors would examine them and see how they are they would save many. If there is no ulceration of the cornea you want to treat the lid, and if not due to gonorrhea the mild cases will get well in three weeks, but if due to gonorrhea you will have to treat it six weeks. For about twenty years I treated cases in the old city hospital and never lost a case in that time. I never lost but one case in thirty-seven years. The cornea was ulcerated beforehand. In infants take the patient on the knee with a shawl wrapped around it, with something over you, and then evert the lid. It is difficult to do. Then have the nitrate of silver and some water and a pipette and a toothpick or something of that kind wrapped with cotton and dipped in the silver. Then lay it on till it turns white and wash it. Do it every day yourself. If you do not you will lose the eye.

Dr. F. C. Heath, Indianapolis: We still have the old controversy as to the use of the nitrate of silver and its substitutes. That controversy, in my opinion, is unnecessary. I have a rule of

action which has been satisfactory. It has given good results in nearly all cases. It is this: In the average case and in the mild cases it is unnecessary to use nitrate of silver. Good results follow frequent cleansing and the use of argyrol as a substitute. In the most severe cases I do not neglect the argyrol or the cleansing, but resort to the occasional applications of the nitrate of silver. I object to the routine use of so violent a remedy as the nitrate of silver. Its use can not be justified unless it can be shown that it is necessary, for this reason: First, it is an extremely painful remedy; secondly, it may damage the eye if not used with caution. Of course, the saving of the eye is the great thing, and if you can not save it without the nitrate of silver you are justified in its use, and in the most severe cases I believe we should resort to it, not depending upon it alone, but in addition to the argyrol and frequent cleansing. I have had considerable experience with these cases, especially of ophthalmia neonatorum, not only in private practice but in the Eleanor Hospital and the city hospital in Indianapolis, and for quite a number of years I have used the nitrate very little. There has been no case in which the eye has been totally lost, during the last four or five years or since I have been using argyrol. I can recall but two cases with ulceration of the cornea at all. The bacteriologists tell us argyrol is not an efficient germicide. It may not be an efficient germicide, but it does something, because if you continue the use of a 5 per cent. solution, dropping in one drop every hour, following cleansing with boric acid, carried out faithfully by the nurse, on the second or third visit very little pus will be found. It is true if you neglect the argyrol for a few hours the pus returns. But that argyrol does something. We do not know whether it inhibits the germs, or whether it acts simply mechanically by crowding out the pus. We do not know whether it stimulates the cells to resist the action of the germs. I do know it does good in these cases, and, inasmuch as it is a painless remedy and usually an effective remedy, I will continue to use it and rely upon it with frequent cleansing in the majority of my cases of ophthalmia neonatorum, and only resort to the nitrate of silver as an adjuvant to this treatment in the most severe cases.

Dr. George F. Keiper, Lafayette: I believe, as the result of education, we are seeing less ophthalmia neonatorum than we used to. It is so in my practice. For the recognition of the cause of this trouble we give great credit to James Gibson in the *Edinburgh Medical Journal* in 1897. He

noted in one case a baby with sore eyes had been born of a mother with what was then called fluor albus. That was a great discovery. Now, in these days, the general practitioner should follow out the method of Credé; that is, filling each eye with a 1.6 per cent. solution of nitrate of silver as soon as the head of the baby is born. The experience of Credé has shown that the percentage of cases in the hospital was reduced from 16 per cent. to .3 of 1 per cent. In other words, instead of being common, it became a very rare disease, and his experience has been duplicated time and again. Some objection has been made to this method because some have had the experience of losing the eye after the application of the nitrate. My opinion is that these results were due to free nitric acid in the nitrate of silver. This should be guarded against. It has been found that the gonococcus is not always present, but we are not going far wrong if we treat it as if it were, because these cases yield very nicely to the nitrate. Argyrol, I believe, acts mechanically in strong solutions. It searches out the innermost recesses of the cul-de-sac and lifts out the pus. Several years ago I went with Reynolds to see a case in which he was relying upon irrigations with boric acid solution every twenty minutes, having a nurse to attend to them and using a special apparatus, and the germs were gotten rid of as quickly as possible. The boric acid and argyrol make an active form of treatment and should be commended.

Dr. W. N. Sharp, Indianapolis (closing): It is almost impossible for one in the limited time to include all that might be said upon this subject. I attempted to bring out a few of the important features. I think, however, there should be some action by the state which shall oblige physicians to use more care in these cases. This large number I have taken from the records of the blind institution, it seems to me, shows that they are blind simply through carelessness and ignorance as well. To illustrate this I asked one of the older practitioners of the state what he would do in a case of ophthalmia neonatorum. "Well," he said, "I would use a little sulphate of zinc, just enough to make it smart. Then I would send to the meat shop and have fresh meat ground up, and apply that to the eye every night." Now, it is just such physicians who are the cause of this large percentage of blindness, because of ignorance. Dr. Hurty has told me of numerous cases of carelessness on the part of physicians that he has come in contact with throughout the state. I think if the state would take this in hand it would be the means of lessening this large percentage.

SPECIAL ARTICLE

INTERNATIONAL CONGRESS ON TUBERCULOSIS.

J. N. HURTY, M.D.

Secretary Indiana State Board of Health.

INDIANAPOLIS.

The long-heralded International Congress on Tuberculosis opened in Washington, D. C., for three weeks, commencing Sept. 21, 1908. In the first and third weeks, public lectures and demonstrations of the exhibits constituted the Congress, and the real Congress met the week commencing Monday, September 28.

The opening was very impressive. The 4,000 seats in the great auditorium were all filled, and despite the efforts of the soldiers, who had been instructed to keep the aisles clear, standing room was at a premium. When the procession of notables, most of them in uniform and decorated with their medals of honor and led by Secretary Cortelyou and Professor Koch, stepped upon the stage, a great ovation was given. The great audience rose, and with cheers and waving of hats and handkerchiefs made the flags of the nations, which decorated the room, move in unison with their enthusiasm.

Dr. Lawrence F. Flick, chairman of the Central Committee, declared the Congress open and announced the names of the honorary presidents. Mr. Cortelyou then delivered his address. This was followed by the short addresses of the representatives of the thirty-three participating countries. From the appearance and from many expressions heard, it was plain that Dr. Jee, the Chinese delegate, made the best speech. He spoke in English without the least accent or hesitation. His attitude of mind and general personality was very pleasing. Dr. Jee greatly pleased Chinese Minister Wu, who sat in the audience with several attaches of the legation, all dressed in gorgeous silks. Dr. Jee ended with the following: "We must work out our own medical salvation through our own medical men, and I hope some day China will have the honor of entertaining this Congress of humanity."

The opening meeting continued from 11 a. m. to 1 p. m. At 2 p. m. the seven sections began work. These sections were: Section 1, Pathology and Bacteriology, Dr. William H. Welch, chairman; Section 2, Clinical Study and Therapy of Tuberculosis, Sanatoria, Hospitals and Dispensaries, Dr. Vincent Y. Bowditch, chairman; Section 3, Surgery and Orthopedics, Dr. Charles Mayo, chairman; Section 4, Tuberculosis in

Children, Etiology, Prevention and Treatment, Dr. Abraham Jacobi, chairman; Section 5, Hygiene, Social, Industrial and Economic Aspects of Tuberculosis, Mr. Edward Devine, chairman; Section 6, State and Municipal Control of Tuberculosis, Surgeon-General Wyman, chairman; Section 7, Tuberculosis in Animals and Its Relation to Man, Dr. Leonard Pearson, chairman.

No matter when any of these sections was visited, a treat awaited. The intensity that existed appears in the fact that Section 1 had 140 papers to read and discuss from Monday noon to the following Friday noon. All the other sections were equally engaged. The program itself was a study. In Section 2 papers were read by Koch, Arloing, Szaboky, Courmont, Kinghorn, Calmette, von Pirquet, Wolf-Eisner, Klebs, Woodhead, Fibiger, Ravenel, Raw, Park, Webb, Vaughn and other well known writers.

The greatest session was held on Wednesday, when all of the sections joined to hear Koch, Smith, Woodhead, Ravenel, Arloing, Fibiger and Raw discuss "The Relation of Human and Bovine Tuberculosis." Koch read first and took the ground that it was not yet absolutely proven that bovine tuberculosis was communicable to man. The following utterance by Koch was received in absolute silence: "Of all human beings who succumb to tuberculosis, eleven-twelfths die of consumption or pulmonary tuberculosis, and only one-twelfth of other forms of the disease. One would have expected, therefore, that those investigators who are interested in establishing the relation between human and bovine tuberculosis would have searched for bacilli of the bovine type preferably in cases of pulmonary tuberculosis. This, however, has not been the case. Evidently, animated by the desire to bring together as many cases as possible of bovine tuberculosis in man, they have investigated particularly cases of gland and intestinal tuberculosis and have neglected the much more important pulmonary tuberculosis. In spite of the bias under which the researches hitherto have suffered, there yet remains at our disposal a sufficient number of investigators of pulmonary tuberculosis to warrant a provisional expression of opinion."

Prof. Theobald Smith followed Dr. Koch. He reviewed the experiments which showed he had concluded that bovine tuberculosis was communicated to the human family. Prof. S. Arloing, of Lyons, spoke in French, the same being immediately interpreted into English. Professor Arloing took sharp issue with Professor Koch, declaring that from the standpoint of hygiene,

his experiments emphasized unity and fusion of the classic types and demonstrated the necessity of taking precautions against tuberculosis, whatever may be its origin, human or bovine.

Dr. Johannes Fibiger, professor of pathology and anatomy, University of Copenhagen, presented a paper, the joint work of himself and Dr. C. O. Jensen, professor of pathology, Royal Veterinary Hospital, Copenhagen, which voiced the most pronounced views heard in opposition to Dr. Koch.

Dr. Mazyke Ravenel, formerly of the University of Pennsylvania, and now professor of bacteriology in the Wisconsin University, followed Dr. Fibiger. He is about 40, stocky build, pleasant, clear voice, a frank, open countenance, and neatly dressed in dark gray. He is a picture of health, evidently has a great capacity for work, and turns off words like a machine gun. The chairman had hardly announced that Dr. Ravenel would discuss the question, and he was at it. He had no notes, and said in part:

"On the correct solution of this question depends, no doubt, the health of many children, and even their lives, and I would consider it an extreme misfortune, not only for this country, but for every country on the face of the earth, if any impression should go from this meeting that even the small proportion of deaths due to the bovine bacillus was a negligible quantity.

"I have inoculated repeatedly the bacilli of the bovine type, absolutely characteristic in every respect to the human, and if not recovered in culture, if examined in the tissue you will find them beaded and stained exactly like the human bacilli. I have also demonstrated that cows cough up sputum and distribute it exactly as human beings do, and in the sputum of such cows I have demonstrated the tubercle bacilli exactly corresponding to the human body.

"One other thing has been proved through the work all over the world, namely, that the tubercle bacilli can pass through the intestinal wall and move through the mucous membrane of different parts of the body very rapidly without leaving any mark of its passage. Demonstrations have shown that inside of four hours, in fact, inside of three and a half hours, tubercle bacilli have passed from the milk of animals through the thoracic duct and have reached the lungs in sufficient quantities to kill other animals inoculated.

"Having demonstrated that there are a certain number of cases due to bovine tubercular bacillus; that a certain number of deaths occur from this bacillus, and having demonstrated that the tubercular bacillus passes into the stomach, or gets there from some outside source, it behooves us

from every point of view to take every precaution possible against contamination of our milk. I do not think it is possible with our present knowledge, and it will be many years before we have sufficient knowledge to determine the number of cases due to bovine bacillus as compared to those due to the human bacillus. There can be no doubt, I think, that at the present time the human phthisis is the phthisis that we must look at for the first victims.

"I can not agree that the proportion of cases due to bovine bacillus is insignificant. It is an extremely important factor. I may call attention to the fact that to stamp out this disease both sides must be looked after. There is no use of keeping cats out if you are going to let the kittens in. The kittens will grow to be cats, and, therefore, it is important to guard against tuberculosis in cattle, not only from the public health standpoint, but because it is a most serious economic question in every civilized country in the world, with one or two exceptions."

In opposition also to Dr. Koch was Dr. Nathan Raw, of Liverpool, who presented the views of the English delegates to the Congress. He contested vigorously the view that tuberculosis from cattle could not be conveyed to human beings.

"As a result of observation in hospitals of more than five thousand cases," said Dr. Raw, "I am convinced that there are two distinct forms of the disease occurring in the human body. The first, or largest group, commonly called consumption, is caused by infection from person to person. The second group occurs chiefly in children and is conveyed by tuberculous milk. I am convinced that when tuberculous cattle are eradicated this latter type of disease will entirely disappear, but I am also convinced that consumption will only be stamped out by education, improved sanitation, and scientific treatment."

When the Koch-bovine-human-bacilli symposium ended, it was the general feeling that Professor Koch had lost the tuberculosis leadership.

Dr. Detre demonstrated his method of differentiating between bovine and human infection on Thursday evening, and this was a further blow at Professor Koch's contention. His method is through the cutaneous test. The application of human tuberculin causes a reaction if the infection is from human bacilli, and the bovine tuberculin causes a reaction if bovine bacilli are the infecting agent. Bovine infection should be treated with bovine tuberculin, and human infection with human tuberculin. Dr. Detre's demonstrations and lectures made a marked impression.

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EDITORIALS

OUR POLITICAL FAITH.

Three medical men, all running for office and partisan politicians, have written us to the effect that *THE JOURNAL* should not discuss political questions or say anything for or against candidates for political office. One writer says that he knows that the editor is a "red hot Democrat or he wouldn't slander Joe Cannon." Another writer says that "if the editor was not a rabid Republican he would not jump on Bryan because he (Bryan) carries quack medical advertising in *The Commoner*."

To all of this we desire to say that the editor is neither a Democrat nor a Republican when he edits *THE JOURNAL*, and his editorial comments of a political nature prove the statement. He is a medical man, with the best interests of the medical profession at heart, and he honestly believes that medical men owe it to themselves and to their profession to take an interest in political questions from a medical man's standpoint. He also believes that *THE JOURNAL* is not overstepping the bounds of propriety or diplomacy in frankly discussing political questions and candidates when such discussion is limited to that phase which is of particular interest and importance to the medical profession, and which should be considered wholly and above the question as to whether it is for or against any political party.

One of the reasons why we as medical men have not accomplished more for our profession and for humanity is that we have devoted too little attention to politics, and in consequence the politicians have given us scant consideration. We have been too long wrapped up in partisan politics to accomplish anything, and with a Democratic or Republican halter around our necks we have been led up to the political trough to drink, and oftentimes swallowed a bitter draught for the sake of keeping in line with one or the other leading political party.

Medical men as a class are way above the average in intelligence and good judgment. There is no reason why they should not wield a powerful

influence for good in a political way, but they never will wield that influence until they begin to think and vote independent of political parties. The doctors in Joe Cannon's district in Illinois could, if they united for the purpose, defeat him for Congress, and if ever a man merited the condemnation of the medical profession that man is Cannon. If the doctors of Indiana would unite in their efforts to elect members of our state legislature who favor rational public health and medical legislation there would be no question about the fate of the measures we labor so hard to have recognized. Let the medical men of Indiana but once make the influence of their vote felt, and ever afterward the candidates for office would be right careful to pledge themselves to support all rational legislation proposed by the medical profession. It is with a view to stimulating medical men to exert this influence that *THE JOURNAL* ventures to discuss some questions having political significance. *THE JOURNAL* is not Republican or Democrat, but it is independent, and at all times and on all occasions will try to uphold all that a progressive, intelligent and conscientious medical profession deems worthy of advocacy and support.

GUBERNATORIAL CANDIDATES WATSON AND MARSHALL ON PUBLIC HEALTH AND MEDICAL LEGISLATION.

Following the suggestion of the Council of the Indiana State Medical Association, *THE JOURNAL* sent the following letter to Hon. Thomas R. Marshall and Hon. James E. Watson, Democratic and Republican candidates for governor:

FORT WAYNE, Oct. 2, 1908.

Dear Sir:—The medical men of Indiana, irrespective of political faith, are constantly working to secure rational medical and public health legislation. Whatever is accomplished by their efforts is for the best interests of all the people and has a value which can not be estimated by a standard of dollars and cents. Indiana has been slow to recognize the necessity for legislation which aids in the prevention of disease and thereby increases the comfort and happiness of the people as well as adds to their wealth. This has been evidenced by the failure of legislators and governors to favor legislation which if enacted would have widened the scope and beneficial influence of the work of our public health boards. At the next, as well as the succeeding, sessions the State Legislature will be asked to place and keep Indiana on a plane with the progressive states that recognize the real value, even from a monetary standpoint, of expenditures and provisions for carrying on

every phase of work pertaining to public health.

Believing that the medical men of Indiana, who are most active in urging medical and public health legislation, are entitled to know how you will act with reference to these important matters in case you are elected governor, we solicit an opinion from you for publication in the October number of *THE JOURNAL*, soon to go to press. We especially desire to ask you if, as governor of Indiana, you will approve all rational public health and medical measures, and in particular if you will approve measures which have as their object an increase in the efficiency and service of the State and County Boards of Health.

Your early answer to these questions, or any comment thereon, will be of interest to the readers of *THE JOURNAL*, who are found in every city, town and village in Indiana.

Very truly yours,

THE JOURNAL OF THE INDIANA STATE
MEDICAL ASSOCIATION.

The following answers were received:

INDIANAPOLIS, Oct. 11, 1908.

Editor The Journal:—I thought I had made myself thoroughly understood in my two printed speeches, in which I said that I was heartily in accord with all measures which the state could afford that would increase the efficiency of the various Boards of Health and would promote preventive medicine.

Sincerely yours,

THOS. R. MARSHALL.

INDIANAPOLIS, Oct. 12, 1908.

Editor The Journal:—I received your letter of the 2d at Indianapolis, and I hasten to respond to it.

You ask me whether or not as Governor of Indiana I am willing to "approve all rational public health and medical measures." I do not see how any right-minded man could object to approving legislation of that character. There may be some dispute as to what constitutes rational or irrational public measures, but certainly no reasonable men ought to disagree on a proposition of that character.

You ask whether or not I would be willing to "approve measures which have for their object an increase in the efficiency and service of the State and County Boards of Health." I do not see how it would be possible to have a difference of sentiment on a matter of that kind. However, men who understand the objects of these boards certainly want to increase their efficiency and would be willing to see such legislation enacted as would bring about that result, and I would certainly approve of such measures.

I am greatly pressed for time and can not write at length, but more need not be said.

Sincerely yours,

JAMES E. WATSON.

Owing to the short time at our disposal we were able to secure but one of the two printed speeches to which Mr. Marshall refers. In that speech, delivered at Richmond, June 3, Mr. Marshall said:

"I believe in the equitable adjustment of salaries, and instead of a horde of petty officeholders parading the State of Indiana and drawing salaries out of its treasury, I should prefer some of this money to be expended in increasing the salary of such men as Dr. J. N. Hurty, men whose life, whose talents and whose learning are being devoted to the upbuilding of the mental, the moral, and the physical welfare of the people of this state."

We are reliably informed that in the other speech Mr. Marshall commented favorably upon the work of the medical profession and the State Board of Health, in the interest of public health, and said that it should be the duty of the state to make suitable provision for increasing the extent and value of this work.

So far as we know, Mr. Watson has made no public reference to public health or medical measures, and in view of his early attitude concerning the "Pure Food Law" so earnestly advocated by the medical profession, we are pleased to have him come out so emphatically in favor of an increase in the efficiency of our boards of health. At the next session the State Legislature will be asked to make larger appropriations for carrying on public health work, and to so change the laws governing the selection of county health officers that such officers will be chosen for their fitness and not because of their political faith, and an adequate salary be paid for their services. To accomplish the desired result will require a very much larger appropriation than has ever before been made, but it is an economical expenditure which the state can well afford and means the saving of many times the amount expended. If the state can expend thousands of dollars for the protection of its hogs, sheep, cattle and horses, as it does now, it certainly can expend a much greater sum for the protection of human lives. No expenditure of money by the state can be of greater benefit from a purely commercial standpoint, to say nothing of resulting comfort and happiness, than the amount spent in public health work, and the governor and legislators should be thoroughly impressed with that fact.

The promises of Mr. Marshall and Mr. Watson indicate that the next governor of Indiana will be in favor of increasing the efficiency and widening the scope of the work of our State and County Boards of Health. It was with a view to

getting the gubernatorial candidates to place themselves on record on this point that led THE JOURNAL to solicit an expression of opinion for publication. We regret that the candidates for the legislature were not also placed on record in a similar way, so that the members of the medical profession would know just what to expect from the men now soliciting votes. So far as the influence and action of the next governor is concerned, it seems quite safe to assume that the aims and objects of the medical profession will receive appropriate consideration at the hands of either Mr. Marshall or Mr. Watson as governor.

LAY HELP IN THE SOCIAL EVIL FIGHT.

Again Editor Bok has come out in a most commendable effort to arouse the laity to reform, but this time the subject for attack is the great "black" plague. In the September issue of the *Ladies Home Journal* there appears upon the editor's personal page a discussion of this evil which merits the perusal of even medical men, who, above all others, are presumed to be familiar with these hideous facts. In truth, the conditions herein described are not one whit overdrawn and the medical profession should rejoice that there is at least one layman who is engaged in reaching a great number of the people, who is courageous enough to come out and face this matter squarely and openly.

Doctors can and should deal frankly and earnestly with their patients in their efforts at education in venereal prophylaxis, but without the support of the fathers and mothers and their more active cooperation but little can be accomplished. So that it is a matter of no little satisfaction to see Editor Bok "put it up to" the parents straight from the shoulder.

The subject is treated under three headings, the condition, the five results, and the remedy. Under the condition the following appears: "Because of the secrecy with which the whole question is enshrouded it is practically impossible to obtain absolute figures. But so far as the highest authorities have been able, through the most careful inquiries, to secure accurate figures, it is a conservative statement to make that at least sixty out of every hundred young men are to-day sowing their "wild oats." Of these sixty young men a startling number are already making or will make a tragedy of marriage. They produce either childless homes, dead-born or blind babies, children with lifelong diseases with them, or they will send thousands of women to the operating table. Exactly what percentage of these sixty men escape the lifelong perils of their early indiscretions it is impossible to tell."

"The statements are not made upon theory, but facts that are proved and demonstrated at thousands of domestic bedsides and in the autopsy rooms of hundreds of hospitals. They are facts that are known to every physician.

"This frightful condition has been brought about largely by two contributing factors: First: The parental policy of mock modesty and silence with their sons and daughters about their physical selves, and, second, the condoning in men what is *condemned* in women. Fathers and mothers, and, in consequence, girls have condoned in a young man this sowing of his 'wild oats' because it was considered a physical necessity; that 'it would do him good; that 'it would make a man of him;' that 'it would show him the world'—all arguments absolutely baseless.

"With hundreds of girls the young man who has most promiscuously and profusely scattered his 'wild oats' has been looked upon as the most favored among possible husbands. To many a girl there is always something alluring to marry a man with a past because it appealed to her vanity to 'remake' or 'reform' him. The peril to herself she has never known, for silence has been the portion meted out to her by her parents."

The five results are given as follows: "First: The lifelong invalidism or the surgical mutilation of thousands of women. Second: The deaths of thousands of unborn or newborn infants. Third: The lifelong taint of disease upon children who do live. Fourth: The blindness of over sixty out of every hundred new-born babies. Fifth: The domestic unhappiness of tens of thousands of homes because of the absence of children."

As the remedy: "Now thousands will naturally ask, 'Is there a remedy for this slaughter and maiming of babies and the surgical mutilation of women?' There is not only a remedy, but a remedy as potent as it is simple. It is this, and it is distinctly 'up to' the parents.

"First: We parents must first of all get it into our heads firm and fast to do away with the policy of silence with our children that has done so much to bring about this condition. Our sons and daughters must be told what they are, and they must be told lovingly and frankly. But told they must be.

"Second: We fathers of daughters must rid ourselves of the notion that has worked such diabolical havoc of a double moral standard. There can be but one standard; that of moral equality. Instead of being so painfully anxious about the 'financial prospects' of a young man who seeks the hand of our daughter in marriage and making that the first question, it is time that we

put health first and money second; that we find out, first of all, if the young man comes to court, as the lawyers say, with clean hands. Let a father ask the young man as his leading question whether he is physically clean; insist that he shall go to his family physician, and if he gives him a clean bill of health, then his financial prospects can be gone into. But his physical self first. That much every father would do in the case of a horse or dog that he bought with a view to mating. Yet he does less for his daughter; his own flesh and blood. Once let young men realize that such a question would be asked them by the fathers of the young women whom they would marry; that a physical standard would be demanded, and that knowledge would be more effective for morality among young men than all the preaching and moralizing and exhortations of the past thousand years. Thus and thus only can we save our daughters and their unborn children. But in no other way."

This editorial is followed by an article in the October issue, by Dr. A. C. Wolbarst, which enlarges somewhat upon the editorial and very aptly states that the time has come for us to cease our ostrich-like policy of hiding our faces from the facts but to turn around and meet the condition squarely as it is found to exist at the present time.

It would seem that reprints from such articles or similar compilations, based upon straight facts, pointing out in plain language where the fault lies and the remedy, mailed by physicians to the various family heads of their clientele, might be productive of considerable results in this thankless campaign heretofore attempted by the medical profession alone.

ANTITOXIN IN DIPHTHERIA.

The time of year is approaching when diphtheria will be more or less prevalent in many localities, and the suggestion that antitoxin be used early and in sufficient doses in every case of suspicious sore throat may not be out of place. The matter is worthy of special note at this particular time because we have learned that recently three children in one family have lost their lives from diphtheria, the attending physician either intentionally or through ignorance neglecting to use the one treatment which at the present time is recognized as practically a specific in this disease.

Diphtheria has lost its terrors since the proper use of antitoxin has demonstrated that the disease can be both prevented and cured. It is un-

fortunate that there are some doctors, though their number is constantly diminishing, who will persist in ignoring the value of antitoxin, and who, if they do use the remedy, do so only as a last resort and then in a manner which experience has shown is devoid of beneficial effect. It has been clearly proven that antitoxin, to be most efficient, should be administered early, the earlier the better, and in large doses. In a suspicious sore throat the antitoxin should be administered at once and the bacteriological diagnosis made afterward. A few hours' delay in instituting antitoxin treatment oftentimes means greatly increased severity of symptoms.

Most authorities are agreed that even to a very young child the dose, under any circumstances, should not be less than 3,000 units, and if the symptoms are severe the initial dose should not be less than five or six thousand units and repeated in three or four hours, and as often as necessary thereafter to bring about the desired improvement. Those who have had the largest experience in the use of antitoxin insist that the guiding practice in the use of the remedy is to give it until the characteristic effects are produced, whether 5,000 or 50,000 units be required for this result. In other words, the antitoxin should be administered until there is shriveling of the membrane, a diminution of the nasal discharge, correction of the fetid odor, and a general improvement of the condition of the patient.

The importance of giving large doses in the very severe and apparently hopeless cases has been clearly demonstrated. The mistake made by many physicians is in giving too little rather than too much antitoxin, as this method of treatment has been proven both safe and efficacious even when abnormally large quantities of the remedy have been used. Of the untoward effects that have been noted the most common are urticaria and arthralgia, but they are trifling and unimportant.

The one fact which stands out prominently is that antitoxin is a specific, and no physician does his whole duty to his patient and to himself if he neglects to use this life-saving remedy.

EDITORIAL NOTES

THE exhibits at the International Congress on Tuberculosis covered two acres. Germany's show was far and away the best, but New York and Pennsylvania were a close second. England, France, Sweden, Hungary, Switzerland, Belgium, Austria, Canada, Argentina, Russia, Uruguay, our

national government, all of the New England States, and Ohio, Minnesota, Wisconsin, Iowa, Illinois and Michigan, all had very excellent exhibits. Indiana had no exhibit, simply because no money was available. How fortunate it was that the legislatures of other states understood the wisdom and economy of letting their light shine before men!

MR. COUNTY SECRETARY, have you done your duty to your society, yourself and *THE JOURNAL* by sending in for publication a report of the proceedings of your county medical society, and such news items and personals as are of interest to the members of the medical profession?

It is intended that the department devoted to "Society Proceedings" shall be a feature of *THE JOURNAL*, but we regret to say that many county society secretaries are not giving us the desired cooperation in carrying out the plan. If your county society is not being represented in *THE JOURNAL* by reports of meetings then ask your secretary why he does not send us the reports.

THE health plank in the Republican national platform reads as follows: "Public Health.—We commend the efforts designed to secure greater efficiency in the national public health agencies, and favor such legislation as will effect this purpose."

The Democratic plank: "We advocate the organization of all existing national public health agencies into a national bureau of public health with such power over sanitary conditions connected with factories, mines, tenements, child labor and other such subjects as are properly within the jurisdiction of the federal government and do not interfere with the power of the states controlling public health agencies."

The Vigo County Medical Society has placed the seal of disapproval upon contract practice by adopting a bylaw prohibiting its members, under penalty of forfeiture of membership, from engaging in contract practice for any lodge, fraternal order, social society or mutual protective association, wherein unlimited services for a fixed and limited compensation are required. This is a step in the right direction. There is nothing more demoralizing than the contract practice engaged in by some misguided medical men, who, for temporary gain, are willing to sacrifice future prospects for themselves and their confrères. But, worse than all else, contract practice breeds indifference to good scientific work.

AGAIN we urge the readers of *THE JOURNAL* to carefully examine our advertising department and patronize the firms advertising with us. Remember that this is YOUR journal, and that our income from advertising enables us to give you a larger and better periodical than otherwise would be possible. Reciprocity is not only warranted but necessary if we are to keep up our present standard. Our advertisers expect returns from the money paid us, and the readers, who are also the owners of *THE JOURNAL*, owe it to the advertisers to give a fair return. No objectionable firms advertise with us, and practically every necessary required by the medical man for use in his profession is advertised in *THE JOURNAL*. We, therefore, urge our readers to give our advertisers the preference, and when doing so to mention the fact to the advertiser.

CONCERNING the working of the Indiana Optometry law the *Ohio Medical Journal* very pertinently says that instead of having a few harmless spectacle vendors in this state we now have a horde of opticians who all call themselves doctors and who do not limit their work to the fitting of glasses but attempt to treat diseases of the eye, and in many instances assume the rights of a physician by prescribing medicines. It is even reported that not a few of the opticians are attempting to perform surgical operations, particularly operations for the relief of strabismus. The harm that is being done by these imposters is incalculable and some effort should be made to suppress the evil. That the average optician is daily breaking the law pertaining to the practice of medicine is a recognized fact, and yet our Board of Medical Registration and Examination, sworn to enforce the medical practice act, are, so far as we know, doing absolutely nothing to stop the opticians from practicing medicine. Certainly it is not lack of evidence which prompts the board to maintain such a painful silence.

Judging from the monthly bulletin issued by the Vigo County Medical Society, and the reports of meetings sent in for publication in *THE JOURNAL*, the medical men of Terre Haute and vicinity are an active and progressive crowd. The bulletins contain not only the programs for the weekly meetings but much interesting miscellaneous information concerning the business affairs of the society. The dues are \$5 per year, and recently an assessment of \$1 was made to

meet current expenses. The society owns a stereopticon which is freely used in illustrating papers and lectures, and clinical demonstrations; exhibition of specimens and microscopical slides are a prominent feature of the meetings. In one of the bulletins the active and capable secretary announces that he wants the members of the society to turn out in force at every meeting so that he can report to *THE JOURNAL* an average attendance of fifty. This shows the proper enthusiasm and spirit, and we call attention to the matter with a view to stimulating other societies to emulate the example.

THE Wisconsin Board of Medical Registration and Examination has succeeded, after long and persistent effort and in the face of powerful opposition, in convincing and driving from the state of Wisconsin a band of advertising quacks who for years have swindled the gullible public and who, with a free use of their ill-gotten gains, were able to control in a large measure the courts of the state through political influence. The Wisconsin board deserves great credit for their persistence in following up the prosecution of such a dangerous and well-entrenched set of scoundrels posing as medical men, and medical boards in other states can well emulate the example. In Indiana there are many notorious medical quacks and pretenders who deserve the fate meted out to their Wisconsin brethren, and our state board of medical registration and examination owes it to itself as well as to the inhabitants of Indiana to take hold of the question. It is neither the duty nor the province of the individual members of the medical profession to enter prosecution in these cases. The medical law of Indiana distinctly states that it shall be the duty of the board to enforce the medical practice act. That the board will have the earnest and loyal support of the medical profession of the state can not be doubted.

County secretaries should remember that the State Association dues are \$1 per year for each member and the fiscal year begins January 1st and ends December 31st. Membership carries with it a subscription to *THE JOURNAL* for the fiscal year only. Dues for any less than a year are not accepted, and, in view of the fact that the dues are so small and the association has no application fee, all new members, no matter when admitted, are required to pay a year's dues, which carries membership and subscription to *THE JOURNAL* to December 31st following the date of admission.

Attention is called to this subject because a few county society secretaries have been collecting less than \$1 as dues to the State Association for unexpired portions of the fiscal year, and some secretaries have been collecting dues for 1908 and requesting the State Association officers to credit membership and send *THE JOURNAL* for the balance of 1908 and all of 1909. It can be readily understood that for every membership for 1908 the accounts of the State Association must show the payment of \$1, no matter what time of year the membership is entered, and one of the requirements of membership at any time is the payment of dues. New members joining the association now are credited with membership until December 31st only, and no one is credited with membership until dues have been paid, and even the American Medical Association will not credit membership in that organization until the State Association membership requirements have been complied with. No objection will be made to donating *THE JOURNAL* for a month or two to prospective members for 1909, but no membership in the State Association for any portion of 1908 can be granted except upon receipt of full dues.

It should also be remembered that *THE JOURNAL* may be secured without membership in the State Association, as any person may subscribe and receive *THE JOURNAL* for a full year upon the payment of \$1. In other words, every member of the association, by virtue of his membership is a subscriber to *THE JOURNAL*, but every subscriber to *THE JOURNAL* is not a member of the association.

The A. M. A. organizers who have been working in Indiana during the last few months have taken several hundred applications for membership in the State Association. Up to date less than one hundred of these applications have been acted upon by county societies. In some instances doctors who are eligible to membership in county societies have written us that they paid their dues to county secretaries when applications were made, but as yet no action has been taken upon the applications. In other instances doctors who have made application for membership in county societies have informed us that they were ready to pay membership fees or dues whenever requested by the county society secretaries to do so.

Some of the county society secretaries, when asked concerning failure to act upon applications, write that applicants have not sent in their fees for membership, and consequently their applications can not be acted upon. This failure to send in membership fees is in many cases due to an oversight or to lethargy on the part of applicants.

But in any case it is the duty of the county society secretary, if he fills his position creditably, to follow up these applications and make an endeavor to secure membership fees, and afterwards encourage these applicants to become active members. No county secretary should take the position that it is the duty of the applicant to approach the county secretary with the fees in his hand. As a matter of fact, the secretary ought to be the aggressive one in seeing that no man who has once become interested in organization ever gets away.

If we are to build up the county societies in Indiana and bring into the State Association all of the eligible doctors in the state, the county society secretaries must lend a helping hand in the organization work, which has been so laboriously and expensively carried on by Dr. McCormack, the A. M. A. canvassers and the councilors. Nothing can be accomplished without work, and plenty of it, and when once organizations have been built up they must be kept active by a continuation of the work which created them.

Most if not all of the county societies have an election of officers in the fall or not later than December. It is not too early to consider the qualifications of the men who are to serve for the ensuing year. We desire to urge every society to use great care in the selection of a secretary, for upon the secretary depends in a very large measure the life and growth of the society. A secretary can either make or break any society, and therefore he should be selected because of his special qualifications for the office. Above everything else he must be energetic and ambitious as well as capable. Under no consideration should the office be given to a man as an honor, for if the duties of the office are properly performed it means hard work and the display of no little executive ability and diplomacy. Generally speaking, the younger men make the best secretaries, as they are more apt to be interested in the work and to comply with the requirements of this important office. When once a good secretary is found he should be retained from year to year or until it is shown that he has outlived his usefulness. Any society can get along with a poor president, but no society can get along with a poor secretary. It is a recognized fact that the most active and the most progressive medical societies have good secretaries, whereas the societies that exist in name only usually have a secretary who has utterly failed to take any interest in his work or make any move to improve the conditions for his organization. It is therefore of the utmost importance that all and in particular the inactive societies weigh well the question of the selection of a secretary.

CORRESPONDENCE

A COMMENT ON CHANGE OF POLITICS.

Indianapolis, Ind., Sept. 20, 1908.

EDITOR THE JOURNAL:

As the note, in your last issue, concerning the announcement of my politics might convey some wrong impressions, I beg the privilege of a few words of explanation. One might infer from the expression "a life-long Republican has decided to vote the Democratic ticket" that I had made a sudden flop, which is far from the case. (Of course I know that you simply used the expression given in the lay press). I never have been in line with the Republicans on the tariff and have differed with them on other points, and, with such views, it was only a question of time when I must have broken away from the association and overcome the prejudice against the Democratic party in which I was reared. A close study of the lives and works of Jefferson and other leaders has helped this along, together with an intense admiration acquired for Mr. Bryan on hearing him speak.

When I announced at the First Ward meeting of Democrats that I stood with them I did not suppose that it would be deemed of sufficient importance to get into the papers. The prominence was thrust upon me and I have been, in a way, roped into making some speeches, and may make more, not of course to the neglect of professional business.

Although the prime motive is sincere devotion to the cause, I believe that I may secondarily increase my usefulness to the profession and public by the influence thus acquired in the Democratic party, especially with relation to medical education, medical and sanitary legislation and other matters, right in the line of the article you quote from the *Journal of the American Medical Association* on "Physicians in Politics."

And in this age of enlightenment and freedom from bigotry in religion or politics, we can differ in opinion without disturbing our friendly relations and without changing our estimation of each other's worth.

Sincerely yours,

F. C. HEATH.

THE LIFE INSURANCE EXAMINATION FEE.

Oxford, Ind., Sept. 30, 1908.

EDITOR THE JOURNAL:

In answer to Dr. Daubenhayer, I wish to say that there is a difference between an old line life insurance company and an assessment company. In the latter the applicant pays the examination fee, and the majority of the applicants for insur-

ance in assessment companies are among the poor classes of people. We are called upon to do charity every day, and I suppose the examination of applicants for assessment insurance goes with it. That is the essential reason why our county society did not make a \$5 fee for all insurance examinations. While Dr. Daubenheyer is urging one fee for all insurance examinations he has of-

DEATHS

Dr. Geo. H. Grant, ex-president of the Indiana State Medical Association and one of the most prominent physicians in Indiana, died at his home in Richmond, September 21, aged 40 years. He was born in Richmond, January 5, 1868, and received his early schooling in that



Dr. George H. Grant, Ex-President of the Indiana State Medical Association, Died Sept. 21, 1908.

ferred no remedy for the \$3 examination fees accepted from the old line companies able to pay what the services are worth. If he will get his county society solid for the \$5 fee from all companies I will promise to get all of the physicians in our county in line, but we would like to see other counties go even as far as we have. We are collecting the \$5 examination fee from some companies that are paying only \$3 in other counties.

R. E. LEE.

city. He graduated from the Rush Medical College, Chicago, in 1888, and for one year following his graduation he practiced at Hanover, Indiana, at the end of which time he located in Richmond, where he continued his professional work until the date of his death. He was a member of the American Medical Association, the Mississippi Valley Medical Association and his own state and county medical societies. In 1905-6 he was president of the Indiana State

Medical Association, a position he filled with honor to himself and to the association. At the time of his death he was lecturer on surgery in the Indiana University School of Medicine, surgeon to the C., C. & L. and Erie railroads, a member of the staff of Reid Memorial Hospital, Richmond; health officer for Wayne county and physician to the Home for Aged Women and the Lutheran Orphan Asylum.

Dr. Grant was not only studious, conscientious and progressive in his professional work, but he possessed that rare faculty of making and holding friends in and out of the profession by his genial and optimistic manner, his loyalty and devotion to his friends and his strict adherence to all the principles which go to make a right thinking and right acting man. During the last few months of his life he was not a well man, though he bravely and uncomplainingly attempted to attend to the requirements of a large and lucrative practice. It is reported that while dependent on account of continued ill health he shot and killed himself.

PERSONALS

Dr. R. S. Wilson, of Berne, Ind., has moved to Wren, Ohio.

Dr. Edward J. McOsear, Fort Wayne, has returned from Europe.

Dr. C. A. Roark, formerly of Milton, has located at Brookville.

Dr. Chas. E. Barnett, of Fort Wayne, is in Europe doing post-graduate work.

Drs. J. F. Barnhill and Chas. R. Sowder returned from Europe September 21st.

Dr. and Mrs. Frank Rudolph, Elkhart, have returned after three months abroad.

Dr. Kent K. Wheelock, of Fort Wayne, is taking an extensive vacation trip in the East.

Dr. Florence M. Olmsted, of Versailles, has located at 218 W. Sixth street, Michigan City.

Dr. Richard E. Holder, Columbus, fractured his arm recently while cranking his automobile.

Dr. Harry Miller, surgeon of the Soldiers' Home, is in Washington attending the Congress on Tuberculosis.

Dr. C. H. Adye has again located at Patronville, Spencer County, after a few months' residence at Troy, Ind.

Dr. H. G. Nierman, Fort Wayne, was a delegate to the Congress on Tuberculosis which recently met at Washington.

Dr. C. J. Overman, who has been at Asheville, N. C., for the past month, in the interest of Mrs. Overman's health, has returned to his home in Marion.

Dr. Perry Wollery, of Heltonville, has just returned from St. Joseph Infirmary at Louisville, where he recently underwent a very delicate surgical operation.

Dr. William H. Wood, Mishawaka, en route, to New Mexico, was seized with hemorrhage September 14th and was removed to the Trinidad (Colorado) Hospital, where he is said to be in a critical condition.

Dr. G. D. Kahlo, president of the Indiana State Medical Association, who has been ill with typhoid fever at the Methodist Hospital, Indianapolis, has recovered sufficiently to enable him to leave the hospital.

Dr. John T. Scott, for many years treasurer of the Indianapolis Medical Society, and Miss Lena E. Hanson were married Tuesday, September 15th in the private car of their friend, E. E. Elliott, in which they were to take their wedding trip.

The many friends of Dr. W. T. Lawson, of Danville, Secretary of the Hendricks County Medical Society, will regret to learn of the death of his wife, which occurred at Danville, September 25, 1908, from the effects of a goitre with heart complications.

Dr. Freeman H. Hibben, for two years assistant surgeon in the Government Hospital at Ancon, Panama, and now general surgeon to the Indianapolis Street Railway, was united in marriage September 15, 1908, to Miss Evadne Hayward, of Indianapolis.

NEWS, NOTES AND COMMENTS

Mrs. Louisa Casselberry, wife of the late Dr. Isaac Casselberry, of Evansville, died September 23rd from exhaustion.

The 1909 session of the American Surgical and Gynecological Association will be held at Fort Wayne. The invitation was extended by Dr. M. F. Porter, of Fort Wayne, who is one of the Indiana members of the association.

THE twenty-third annual meeting of the Conference of State and Provincial Boards of Health of North America was held at Washington, D. C., Sept. 25 and 26, 1908. It was the largest attended and best meeting in the history of the society. Drs. Hurty, McCoy and Tucker of the Indiana State Board of Health were present.

Notice to the physicians of the Ninth Councilor District of the Indiana State Medical Association. The date of the District Meeting has been changed from October 13 to *November 10*; place of meeting Crawfordsville. The House of Delegates will meet at 10 a. m. Each county society should elect its delegate immediately. Dr. J. N. Hurty will be the guest of honor. A banquet will be served in the evening.

CHAS. CHITTICK, President.

GEO. F. KEIPER, Secretary.

The Twelfth Councilor District Medical Society will hold its semi-annual meeting at Fort Wayne on Tuesday, October 27. The morning program consists of an orthopedic clinic at St. Joseph Hospital, to be conducted by Dr. John Ridlon, Professor of Orthopedic Surgery in the Northwestern University, Chicago, and Dr. Maurice Rosenthal, of Fort Wayne. The afternoon program is as follows: "Two Rare Heart Lesions," report of case, by Dr. Fred. Metz, Ossian, and Dr. B. W. Rhamy, Fort Wayne; "Lateral Curvature of the Spine," by Dr. John Ridlon, Chicago. "The Treatment of Cross Eyes," by Dr. Albert E. Bulson, Jr., Fort Wayne; "The Anemias of Pregnancy," by Dr. L. P. Drayer, Fort Wayne. The evening program consists of a paper by Dr. Joseph Brennehan, of Chicago, on "Infant Feeding," and a stereopticon illustrated lecture, subject to be announced later, by Dr. Reuben Peterson, Ann Arbor, Mich. The evening meeting will be followed by a smoker to be given at the Fort Wayne Club. The Twelfth Councilor District Medical Society has already proven itself

one of the most active and progressive councilor district societies in the state. All of the previous meetings have been very largely attended and the programs have been of unusual excellence. It is expected that the coming meeting will fully equal its predecessors. The officers of the society are as follows: President A. P. Buchman, Fort Wayne; First Vice-President, J. L. Gilbert, Kendallville; Second Vice-President, H. F. Costello, Decatur; Secretary, E. M. Van Buskirk, Fort Wayne; Treasurer, D. C. Wybourn, Shendon.

The fall meeting of the Eleventh Councilor District Medical Association was held at Wabash, Thursday, October 22. The committee in charge had made arrangements for a good scientific and practical meeting, while the social features were not neglected. The Ladies' Committee of the Wabash County Medical Society had arranged suitable entertainment for the wives and friends of the members during the business and scientific session in the afternoon. The banquet in the early part of the evening likewise included the entertaining of the ladies. The annual election of officers took place at this meeting.

The tenth annual meeting of the Ohio Valley Medical Association will be held at French Lick, November 11 and 12, 1908. A program of thirty-six papers is announced. The following Indiana men are on the program: Drs. N. A. James, St. Meinrad; F. L. Davis, Evansville; H. R. Allen, Indianapolis; J. R. Eastman, Indianapolis; T. Victor Keene, Indianapolis; L. D. Brose, Evansville; A. E. Sterne, Indianapolis; Carl Viehe, Evansville; G. W. Combs, Indianapolis, and A. M. Hayden, Evansville. The list of officers is as follows: President, Dr. J. L. Wiggins, East St. Louis, Ill.; First Vice-President, Dr. Curran Pope, Louisville, Ky.; Second Vice-President, Dr. Albert E. Sterne, Indianapolis; Third Vice-President, Dr. G. Frank Lydston, Chicago; Secretary and Treasurer, Dr. Benj. L. W. Floyd, Evansville.

The annual meeting of the Eighth Councilor District Medical Society was held at Anderson, October 22. The President, W. L. Bryan, of Indiana University, delivered an address on "Medical Cooperation." After dinner the meeting was in the hands of the following: Dr. J. B. Fattie, Anderson, "Text Book Essays;" Dr. H. A. Cowing, Muncie, "Cooperative Medicine;" Dr. John Oliver, Indianapolis, "Doc Seifers;" Dr. Fred. Ruby, Union City, "How to

Get Money Out of an Automobile;" Dr. G. R. Green, Muncie, "Benzene or Betsy;" Dr. H. R. Alburger, Bloomington, "Post Mortem Values;" Dr. R. E. Brokaw, Portland, "The Mind of the Patient;" Dr. H. R. Danfield, Marion, "The Poor Devil." Article 4, Section 11, Clause 44 of the revised constitution and by-laws states: "Any person who uses the personal pronoun 'I,' talks shop or tries to work the specialist game, is subject to a fine and expulsion from the society."

SOCIETY PROCEEDINGS

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of Sept. 1, 1908.)

The society met in regular session in the Assembly Room, Tuesday evening, September 1. Meeting called to order by President Dr. W. D. Calvin, with thirty members present. Minutes of previous meeting read and approved.

Dr. C. E. Barnett presented some specimens for inspection. (1) Appendix with a hog bristle in it. Appendix had been removed from Dr. S. (2) Appendix taken from baby 4 months old. Baby had been operated for strangulated inguinal hernia and the appendix was found to be in the hernial sac, and was removed. (3) Uterus with submucous fibroma in it. This little affair had bled so profusely on five or six occasions that it almost exsanguinated the patient before it was removed.

Nephrectomy.—Case report and patient exhibited by Dr. C. E. Barnett. Patient, Mr. D., age 55, married; two children; occupation, farmer. First symptoms began three years ago with pain in both lumbar regions. Last September patient noticed bladder pain and pain at the end of penis. Family history showed a daughter having died five years ago from tuberculosis. Patient was treated by many physicians for his bladder trouble, but each treatment was followed by an increasing inflammatory action; his physician reported considerable blood, pus and albumen in his urine. Nocturnal micturition frequency began three years ago; bladder capacity was found one-fourth normal. Cystoscopy was done May 5, 1908; right ureter was seen emptying pus; bladder soon filled with pus and blood, obscuring the field. Patient was sent home with directions for his physician to inject 10 per cent. iodoform oil into the bladder every third day, besides washing the bladder daily. May 25 the bladder capacity was found to be one-half greater. Cystoscopy found left ureteral opening seemingly healthy; the right side of the bladder trigone was found ulcerated and the ureter again pouring pus. May 31, cystoscopy showed left kidney competent; (nine minutes prior patient had been injected with 30 min. of indigo carmen;) right kidney showed incompetent to blue reaction. On June 4 the lumbar pain symptoms were not marked on either side, the right side possibly predominating on deep pressure. Cystoscopy findings were the only true symptoms for operation, outside of the urinalysis made by Dr. Rhamy, which showed quantities of tubercle bacilli and kidney detritus.

Patient was sent to St. Joseph Hospital and for two days the kidney and bladder were thoroughly flushed out. On June 6, a five-inch oblique lumbar incision was made through to the perinephritic fat, and found the right kidney densely adherent and considerably unneffed. Kidney delivered by shelling it out of the capsule; stump ligatured and kidney removed; vessels separately ligated and ureter tied off; ureter tubercular and as large as a lead pencil. The cavity was drained with a cigarette drain to ureteral stump, which is located in the mid iliac fossa, and fascia and muscles closed in tiers down to and up to drainage tube (iodoform gauze drain to renal stump). Skin was closed with silk worm gut and patient put to bed in Fowler's position. On June 8 the patient's condition was good; was up out of bed. He passed twenty-six ounces of cloudy urine during the first twenty-six hours. On June 15 the stitches were removed (primary union), and cigarette drain was also removed and iodoform gauze introduced. Condition was admirable. Patient left hospital for his home on July 1.

Prostatectomy.—Case report and patient exhibited by Dr. C. E. Barnett. Patient, Mr. W., age 67; married three times; three children dead. Was an old soldier who had been shot in the right thigh and the femur broken, but the bullet was not found. Dead bone came away after the injury in 1864. His present trouble was pronounced nine months ago, beginning with pain in the end of penis, and frequent micturition. June 11, 1908, patient micturates every fifteen minutes; no retention. Rectal examination showed marked prostatic hypertrophy in right lateral lobe. On June 11 urinalysis showed heavy cloud, acid 60, albumen 9 per cent., pus 3 per cent, pavement cells and a few blood cells. On June 24 urinalysis: Albumen 8 per cent., urea 2.2 per cent. Patient sent to hospital June 16 and placed on eliminative treatment with daily bladder washings with boric acid solution. June 29, urinalysis: Sp. gr., 1.016, reaction acid, transparency cloudy, and albumen 3 per cent. by volume. Patient operated June 30, a pre-operative cystoscopy being done. Prostatic hypertrophy was seen, but no stone discovered by sight or sense of touch. (The skylight made the room too light for cystoscopic examination.) A tubercle-hair incision was made; dissection to bulb, and bulb lifted up. Central tendon was cut and urethra opened on staff from membranous urethra into bladder neck. The stone searcher found stones, and forceps delivered five highly polished faceted stones, each about the size of the thumb nail, and about the thickness of the thumb. The right and left lateral lobes of the prostate were delivered, the right being much the larger and the so-called middle lobe slightly enlarged. The small portion was removed and drainage tube introduced into the neck of the bladder; adrenalin injected and bladder washed. Two small pieces of gauze were packed along the drainage tube, which was closed in the usual way. Patient was put to bed in exaggerated Fowler's position with continuous drainage. On the next day, July 1, the patient's condition was admirable; he was out of bed. July 14 he returned home from the hospital, forty miles distant, on the railroad, in fine shape. Instructions were given to his physician to irrigate the bladder twice daily and keep the perineal drainage opening as large as possible. On August 2 patient returned to the office with a history of improvement in every direction. His physician was unable to introduce the smallest probe into the perineal

sinus July 30. Found perineum entirely closed. The Kollman dilator was introduced into the bladder without difficulty and dilated to 23 F. without pain. The patient reports nocturnal micturition frequency, and at no time more than twice, and claims perfect bladder control. One feature of special interest in the case was the enormous albuminuria complicating its beginning. On the evening of September 1 was able to dilate to 25 F. without pain.

Dr. E. J. McOscar, in opening the discussion, said that in tuberculosis of any part of the body it is well to remove the focus of infection if possible. But in supposed cures we should not overlook the resisting power of the patient as a factor where surgical treatment failed to reach such foci. He reported a case of tuberculosis in a woman where, by segregation, pus was collected from both kidneys. The left showed tubercle bacilli present, and the right showed pus, but no tubercle bacilli. The fact that both kidneys were throwing out pus decided the surgeon to let the case alone and not operate, because of the likelihood of both kidneys being tubercular. At best both were seriously diseased and two defective kidneys are better than only one kidney and that defective. She developed a facial erysipelas of a very severe type which continued for several weeks. She was given urotropin, etc. In three or four months the pain subsided and now, after five years, she claims to be relieved from all pain, has gained in body weight, and presents no symptoms referable to kidney function. Had not pus been present in the secretion from the right kidney the clearly tubercular kidney would have been removed and the return to apparent health would have been accredited to the surgical treatment.

He reported another case of a man, a minister, who for nine years had suffered from bladder trouble; gravel. He presented a fluctuating mass on the back, and incision was made and about a gallon of foul, stinking pus came out. Pus of the same character was voided from bladder in large quantity. This incision was done to relieve him, as it was thought that he could live only a short time. From 160 pounds weight he was reduced to 111 pounds. A few weeks following the incision he was removed to hospital and the kidney removed, which was found to be very much disorganized and numerous stones were found in the suppurating mass. The ureter was not removed. Following the operation the patient gradually regained his weight, and the discharge ceased after several months. After ten months he had taken on about his normal weight, which has continued two years and three months after the operation.

In closing the discussion Dr. Barnett said, concerning the removal of the ureter, he believes it ought to be removed. In this case it was left for second operation if necessary. A great number of authorities say that a diseased ureter if left will drain itself. If you have tuberculosis of kidney on one side and don't remove it you will have tuberculosis on the other side before long.

Malaria.—Case report by Dr. H. K. Mouser. Patient, girl, age 16, middle grade, an imbecile. Family history and previous history negative. She was admitted to the hospital on June 18, 1908, with a temperature of 104, pulse 110, respiration 28. Physical examination was negative, with the exception of slight distention of abdomen, together with some little tenderness. Patient's limbs were cold and lips blue, but she had a bright appearance. Urine 48 oz. in twenty-

four hours and presented nothing of interest chemically or microscopically. Blood examination gave 70 per cent. hemoglobin, red 4,100,000, and whites 4,107; differential count, small 2 per cent, large 34 per cent., polymuclear 64 per cent. On June 26 and 30 the Widal reaction was negative. Blood was examined in fresh and stained specimens repeatedly, but gave no sign of the hemameba malaria. The patient as shown by the chart ran an irregular remittant temperature varying from 97 to 105.2 F., together with irregular chills and sweating. The face and extremities were cyanotic. On July 12 the patient was given 30 grains of quinin sulphate in divided doses of 10 grains each an hour and a half before expected chills. The patient had a slight chill with temperature of 99 degrees, after which temperature fell to normal and remained there. With the aid of arsenic and iron the patient completely recovered. This case illustrates the cases of irregular temperature due to malarial infection in which the hemameba can not be found in the peripheral circulation. While quinin will often clear up an irregular temperature due to malarial infection, yet the salutary effect of this drug, together with the clinical picture presented by this case, marks it one of estivo-autumnal malaria.

Typical Lobar Pneumonia, involving right upper lobe. Case report by Dr. Mouser. Patient, boy 17 years of age, admitted to hospital in a chill; toxie symptoms were marked by vomiting, which lasted three days. The examination marked case as one of lobar pneumonia, as shown by the chart. The points to be mentioned in this connection are the good effects of fresh cold air in the treatment and the correct use of a heart stimulant. Northrup was the pioneer in advocating cold air treatment in pneumonia. Pneumonia is a self-limited disease, and a great many cases will recover with good nursing alone. Those cases in which the toxemia is marked are the most likely to prove fatal. Air, fresh and cool, together with proper diet, proper attention to the bowels and good nursing, make up the main treatment. On the third day the heart in this case began to flag. Digitalis is the remedy in cases like this; it strengthens the heart muscle and rests it, not whipping it out like alcohol and strychnin do at times. That strychnin and alcohol act more quickly is the only excuse for using either of them in preference to the digitalis, and then only in exceptional cases. That digitalis acts in the presence of comparatively high temperature is shown by the pulse in this case being reduced and strengthened in the presence of a temperature of 103 to 104. This boy had the crisis on the fifth day and was discharged on the twelfth day after admission.

Sarcoma.—Case report by Dr. Mouser. Patient, a girl, 19 years of age, was discovered to have a hard growth involving the short head of the right biceps. In November, 1907, the growth was removed entire. Microscopical examination showed it to be a fibrosarcoma of large spindle cell type. In May, 1908, the tumor began to return and the patient, owing to her lowered condition, was not deemed strong enough to resist another operation. For three months she has been receiving gradually increasing doses of the combined toxins of Coley every other day. The treatment in Dr. Mouser's opinion, has not been in the least beneficial.

A Case with Three Major Operations at One Sitting.—Reported as follows by Dr. B. Van Sweringen. Mrs. M., 65 years of age, was referred to me by Dr. Dippel.

of Huntington, Ind., for a hysterectomy for a suspected malignancy of the uterus. Her menopause occurred at 50 years, and it was not until last winter that she again saw a bloody discharge from the vagina. This appeared only at times, but in addition there was a constant discharge of pus. Pain was also complained of in the pelvic region on both sides. The uterus was prolapsed, enlarged and heavy, but freely movable, and she had not lost very much weight, so that it seemed a favorable case for operation. The perineum was gone, down to the rectal sphincter, and there was found a caruncle at the meatus urinarius. At the umbilicus was found a tumor the size of a small orange which could not be reduced into the abdominal cavity, and which, from the consistency, was thought to be an omental hernia incarcerated. In the gall-bladder region was felt a tumor the size of a man's fist, somewhat tender on palpation. There was no history of clay-colored stools nor had she suffered much from "stomach trouble."

It was thought best to go after what appeared to threaten her life most, and do as much as possible after the hysterectomy was accomplished. Accordingly the abdomen was opened in the midline below the umbilicus, and what appeared to be an enlarged uterus was grasped with a strong volsellum forceps and drawn up in the wound. It was then seen that the broad ligaments were absent or represented by very insignificant structures at the bottom of the pelvic cavity. Upon closer examination it was found that what we had to deal with was a senile uterus from the very fundus of which had developed a fibroid about the size of a pear, resembling very closely the shape and size of an ordinary uterus somewhat enlarged. This fibroid was removed and the fundus of the uterus grasped and drawn up, revealing the broad ligaments in their usual position. The hysterectomy was then completed, the whole organ being removed.

The umbilical hernia was next treated by excision of the sac and ligation and removal of the contained omentum. It was found that the edges could be approximated in the vertical direction.

The gall bladder was next palpated and found filled with calculi. An incision was made two inches to the right of the midline incision, and the gall bladder emptied of five of the largest gallstones it has been my fortune to see contained in one gall bladder. This was not accomplished without considerable difficulty, especially the last and largest one, which was impacted in the cystic duct.

The operation lasted two hours and after she recovered from the immediate effects she had no untoward symptom. Her color lightened each day as the drainage improved, and she left the Lutheran Hospital in four weeks, with the fistula closed. The case is interesting as indicating what a patient 65 years of age will stand in the way of surgical procedures and yet make a good recovery.

Dr. Rhamy's report on the specimen was adenomyoma of the uterus, also two adenomatous polyps in one of the cornua. These accounted undoubtedly for the hemorrhage.

In opening the discussion Dr. Weaver said that Coley advises that fluid be given daily and that the best effect is obtained when they do react. Reported case of sarcoma of the ovary in which Coley's fluid was used in conjunction with dechloridization. Dropsy came down but patient was not materially benefited by the treatment.

Motion was made and seconded and carried that the secretary send in the names of quacks to the A. M. A. Directory when presented to him.

Dr. C. H. English presented resolutions concerning legislation with reference to the use and sale of explosives on the Fourth of July, and a motion was made and carried that a committee of three be appointed to bring the matter before the city council. President appointed Drs. C. H. English, E. J. McOscar and K. K. Wheelock.

Adjourned.

J. C. WALLACE, *Sec.*

GREENE COUNTY.

The Greene County Medical Society met in regular session at Lyons on September 17, with twenty members present. This was one of the most enthusiastic meetings in the history of the society. The first papers of the evening were on the subject of "Chorea," by Drs. L. A. Hyde and J. M. Harrah, which brought out considerable discussion. The subject of "Melancholia" was presented by Drs. J. M. Jackson and A. F. Knoefel, which was also freely discussed by those present.

During this meeting a resolution was introduced to abolish or repeal a former resolution making the fee for all old line insurance examinations \$5, but it was almost unanimously voted down.

After meeting adjourned an elegant supper was enjoyed at the Lyons Hotel.

The next meeting was held at Worthington, on October 15, the subject being "Responsibility in Mental Disease."

FRANK A. VAN ZANDT, *Sec.*

GRANT COUNTY.

The regular meeting of the Grant County Medical Society was held September 22. "Typhoid Fever" was the subject of a paper by Dr. Toney, which brought out an extended discussion. Dr. Davis also read a paper on "Diarrhea of Children."

Adjourned.

O. W. McQUOWN, *Sec.*

KOSCIUSKO COUNTY.

The regular meeting of the Kosciusko County Medical Society was held September 15. The first paper of the afternoon was by Dr. J. E. Potter of Milford, entitled, "Etiology of Typhoid Fever, Methods of Transmission, Prophylaxis." This was discussed by Drs. Burket, Cary, McDonald, Yocum, Howard, Thomas and Nehrhas. Dr. J. G. Nehrhas then read a paper on typhoid, entitled, "Intestinal and General Pathology," which was discussed by Dr. Burket. Dr. A. C. McDonald, Warsaw, spoke on the "Diagnosis, Symptomatology and Special Symptoms," after which President C. R. Long, Piercetown, took up the question of the "Treatment of Typhoid Fever." The former paper was discussed by Drs. Warvel, DuBois, Howard, Cary, and Leiter, and the latter by Drs. Haworth, Cary, McDonald and Burket.

It was moved, seconded and carried that a committee of three be appointed to look over the constitution and by-laws of the society and report at the next meeting any amendments which they consider would be of value. The following committee was appointed: Drs. A. C. McDonald, C. C. Dubois and G. W. Anglin.

Adjourned.

C. NORMAN HOWARD, *Sec.*

SPENCER COUNTY.

The regular meeting of the Spencer County Medical Society was held at Chrisney, September 15. Minutes of previous meeting read and approved. The evening was spent in the discussion of typhoid fever, which was opened by Dr. H. Q. White. Each member presented some little variation in treatment, but all were agreed on calomel for cleansing the alimentary tract and quinin during the initial stage, sponging of either hot or cold to reduce fever, and strychnia in order to support the patient.

The next meeting of the society will be held in Rockport the third Tuesday of October.

Adjourned.

H. Q. WHITE, *Sec.*

VIGO COUNTY.

The Vigo County Medical Society did not take a summer vacation this year, but held meetings every Tuesday night throughout the hot weather, with an attendance that was gratifying.

Under the auspices of the society, the State Board of Health gave a public tuberculosis exhibit all day July 2, with a popular lecture in the evening by Dr. J. N. Hurty. The success of this meeting warrants us in recommending that every county society secure this exhibit for at least one day.

During the month devoted to typhoid fever, demonstrations were made of the new diagnostic test for that disease. The blood of a suspected case was mixed with a culture of ox-gall. After incubation, a hanging drop preparation showed the motile bacillus typhosus. The result was verified by a control specimen of ox-gall mixed with a pure culture of the same germ.

Dr. Knowlton showed photographs of a case of hydrocephalus in which the head of the child, 1 year and 10 months old, was 40% inches in circumference. Dr. Cook showed a case of tuberculosis of the spleen, liver and mesentery in a boy aged 13. Other cases were reported by Dr. W. R. Mattox on birth paralysis; Dr. Bohn, spina bifida, Dr. Louis, incipient tuberculosis, and Dr. Bloomer, on cement workers' erythema.

* * *

At the regular meeting of this society on August 25 Dr. Schell entertained the society with a lantern exhibition of slides, covering practically every pathological lesion found in the liver.

* * *

The Vigo County Medical Society met in regular session September 1, with thirty-one members present. Dr. Mullikin lectured on "The Physiology of the Kidney," and Dr. Leavitt on "Hematuria and Hemoglobinuria."

The following physicians were unanimously elected to membership in the society: Drs. O. T. Crafton, W. G. Crawford, R. Z. Taylor, F. L. Farman and L. A. Salb. Prof. C. L. Mors, M.D., Prof. C. R. Dryer, M.D., and J. A. Pinson, M.D., were elected to honorary membership. The secretary read a fee bill in which the amounts were averaged from replies received to letters sent different members, and the same was ordered printed.

Dr. J. H. Weinstein, after a discussion of the evils of lodge practice, submitted the following resolution, which was unanimously adopted and was ordered printed as an amendment to the by-laws:

Resolved, That any lodge, fraternal order, social society, or mutual protective association practice,

wherein unlimited services for a fixed and limited compensation are required, shall not be permissible by any member of the Vigo County Medical Society, and any member engaging in such contract practice after Jan. 1, 1909, shall forfeit his membership in this society.

Adjourned.

CHARLES N. COMBS, *Sec.*

BOOK REVIEWS

TEXT-BOOK OF SURGICAL ANATOMY. By William Francis Campbell, M.D., Professor of Anatomy at the Long Island College Hospital. Octavo of 675 pages, with 319 original illustrations. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$5.00 net; half morocco, \$6.50 net.

There is here presented a very practical work on essential anatomy as used in every day work by the surgeon, without any attempt to cover all the details of a descriptive treatise of the subject. Many valuable hints in operative surgery are inserted which are at the same time intensely practical.

A few grammatical and typographical errors have unfortunately crept in, but will doubtless be eliminated in future editions.

A profusion of illustrations which are well done, combined with an appended bibliography of the subject matter, serves to make this work deserving of a place among the standard texts on the subject.

PULMONARY TUBERCULOSIS AND ITS COMPLICATIONS. By Sherman G. Bonney, M.D., Professor of Medicine, Denver and Gross College of Medicine, Denver. Octavo of 778 pages, with 189 original illustrations, including 20 in colors and 60 x-ray photographs. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$7.00 net; half morocco, \$8.50 net.

A thoroughly practical and comprehensive treatment of the subject embraced in the title of this work is at last offered to the hungry profession of our continent by one who has a wonderful store to draw upon. In the midst of an environment teeming with clinical material ready to demonstrate each and every phase of the subject, Dr. Bonney has proven himself equal to the occasion and produced a work that meets the crying need of every general practitioner.

Possibly some would desire that he incline to a less restricted use of the subcutaneous tuberculin test in the early cases, and yet his stand is here only equally conservative with that which he has wisely adopted in regard to other problems, such as the wholesale denunciation of the climatic treatment.

More about home treatment for the indigent would have been welcome.

An admirable set of skiagrams and a profusion of illustrations accompany this most excellent and timely work.

ANATOMY, DESCRIPTIVE AND SURGICAL. By Henry Gray, F.R.S., late lecturer on Anatomy at St. George's Hospital, London. New American edition, enlarged and thoroughly revised, by J. Chalmers Da Costa, M.D., Professor of Surgery and Clinical Surgery, and Edward Anthony Spitzka, M.D., Professor of Anatomy in the Jefferson Medical College of Philadelphia. Imperial octavo, 1625 pages, with

1149 large and elaborate engravings. Price, with illustrations in colors, cloth, \$6.00 net; leather, \$7.00 net. Lea & Febiger, publishers, Philadelphia and New York, 1908.

Gray's Anatomy, larger, more complete and more improved than ever, is striking evidence that "Gray's" will continue to be, as it has been for over fifty years, the standard anatomy for student, teacher and practitioner. The publishers have very wisely selected two able and noted authorities to thoroughly revise, re-edit and supplement this new edition, and as a result they have produced a work that has no equal. Every page shows evidence of alteration and improvement, and the whole section on the Nerve System has been rewritten in conformity with recent revolutionary changes in methods of approaching and viewing it. The liberal use of colors in illustrating very greatly enhances the value of the work, and as the publishers announce, "the new Gray's Anatomy embodies all that careful thought and unstinted expenditure can combine in book form, and it now enters its second half-century well equipped to excel even its own record."

PRINCIPLES AND PRACTICE OF GYNECOLOGY. By E. C. Dudley, A.M., M.D. Professor of Gynecology in the Northwestern University Medical School, Chicago. Fifth edition, thoroughly revised. Octavo, 806 pages, with 431 illustrations, of which 75 are in colors, and 20 full-page colored plates. Cloth, \$5.00 net; leather, \$6.00 net; half morocco, \$6.50. Lea & Febiger, publishers, Philadelphia and New York, 1908.

This work is dedicated to Thomas Addis Emmet. The introductory chapter is a strong and eloquent plea for gynecology as a specialty, and especially for the combined specialties of gynecology and abdominal surgery. The great debt which surgery owes to the gynecologists is clearly and forcefully shown.

The plan of the work is rather pathologic than anatomic. That is, the various infections, tumors, etc., are classed together as they are manifest in the various structures instead of treating of these varied conditions as they appear in one organ. Thus, after the consideration of general principles in part first, infections, inflammations and allied disorders are treated of in part second, while tumors, tubal pregnancy, and malformations are taken up in part third, and so on.

Space will not permit of a complete review in detail of this book, nor is it necessary of a work so well and widely known as one must be to have reached the fifth edition. Suffice it to say that it is a clear, strong, systematic and altogether splendid exposition of the subject, brought well up to date.

The illustrations are numerous and good, though wanting perhaps a little from an artistic viewpoint. The use of heavy-faced type for headings and sub-headings makes it easy to refer to any particular phase of a subject. The index is ample. The paper, type and binding are good.

There are many, no doubt, who will disagree with the author on some points, but all will agree that the book bears ample evidence that it is the work of a master.

MEDICAL GYNECOLOGY. By S. Wyllis Bandler, M.D., Adjunct Professor of Diseases of Woman, New York Post Graduate Medical School and Hospital. Octavo

of 675 pages, with 135 original illustrations. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$5.00 net; half morocco, \$6.50 net.

Non-operative Gynecology, or, better still, perhaps, Minor Gynecology, would more clearly indicate the field covered by this book. For certainly dilatation of the cervix, curettage, intrauterine applications, etc., etc., are surgical procedures. The first part of the work is given to a description of the methods and means used in examination and treatment of gynecologic cases and includes with the more common the less common, such as bacterial cultures and inoculation, and the Nauheim bath.

The anatomy and physiology of the genital organs are largely omitted, and, we think, wisely so. Following the introductory sections above noted, the symptoms and diseases usually discussed in books of this kind are taken up, and in addition other subjects more or less closely related to gynecology, and yet not essentially a part of it, are discussed. Special mention should be made of the section on constipation which occupies forty-two pages, and is especially good. Other noteworthy sections belonging in this category are that on pain, including vaginismus, dyspareuria, and coe-ygodinia, and that on associated nervous conditions in gynecology. The author's views are sane and sound and hence in accord with the majority of the advanced gynecologists of the day. Especially commendable is the section on uterine deviations and their relation to pregnancy, together with the prophylactic effect of intelligent treatment of women after labor.

The plan of the work is unique, indeed it may be said that it is not methodical, but it is very interesting and very good, and especially valuable to the general practitioner because of the emphasis put upon diagnosis; for it is he who must make at least the provisional diagnosis in many gynecologic cases if they reach the surgeon early enough for a timely operation. The publishers' work is satisfactory.

ABSTRACTS FROM CURRENT MEDICAL LITERATURE

Convinced that the distribution of samples of patent medicines in violation of the Cleveland city ordinance had resulted in many cases of sickness and one death among children, the judicial committee of the city council took steps in a meeting recently to enforce the ordinance. Dr. Martin Friedrich, health officer, was instructed by the committee to write a letter to the chief of police asking him to rigorously enforce the ordinance. The police will be ordered to make arrests wherever violations are discovered.—*The Lancet-Clinic*.

The public is by no means doing its whole duty towards its children when it furnishes them with what is generally understood by the word education, and when it permits its schools to be devoted entirely to the training of the mind. A child with physical defects can never compete with a perfectly healthy child, and when these physical defects are such as may be easily remedied it is the duty of the public to see to it that these defects are looked for and that the proper medical means are taken by those who have charge of the schools.—*The Lancet-Clinic*.

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ORIGINAL ARTICLES

SCOLIOSIS.*

DAVID ROSS, M.D.

INDIANAPOLIS, IND.

In 1519 Ambrose Paré, in one of his published volumes, said: "For God is my witness, and all good we know, that I have labored fifty years with all care and pains in the illustration and amplification of surgery; and that I have so certainly touched that work whereat I aimed, that antiquity may seem to have nothing wherein it may exceed us beside the glory of invention, nor posterity anything left but a certain small hope to add some things."

Though posterity since then has added many things to the sum total of surgical knowledge, yet we would each be doubtless willing to admit that what we each are able to add in our time and sphere is small enough, so I do not claim much, if anything, for originality in what I may say to-night.

Gray tells us in his description of the spine that it is a flexuous and flexible column composed of a series of bones called vertebrae (from *verte*, to turn), and it is this ability not only to bend but to form the compound curves which makes the spine so graceful, as well as useful in overcoming deficiencies of the body elsewhere. Also its slight degree of rotation between each vertebra permitting a man to see objects other than those directly in front of him that makes the disease, or condition, under discussion possible. So all through life every good is offset by possible harm. Without these advantages of flexion, flexuousness and rotation there could be no curvature of the spine, neither could man en-

joy the manifold blessings and comforts that these properties bring.

"Lateral curvature of the spine is a habitual or fixed deformity in which the spine is deviated in whole or part to one or the other side of the median line."—Whitman.

The definition, as given, excludes all the compensatory curves that disappear when the condition or need which called them into being ceases to exist or operate. The curve, or curves, that result from the tilting of the pelvis because of the shortness of one leg, disappear when the patient sits down.

In fixed lateral curvature we have passing into a pathological state what we have in a less degree as a physiological function of the spine. In all bending of the spine of any appreciable amount to either side there is also some rotation of the vertebrae, the bodies turning to the side of the convexity. In all simple accommodative lateral inclinations of the spine, the change in contour would be more marked if viewed from in front, or, in other words, the change in contour is more marked in the bodies than in the spines, and since the pathological is simply the physiological exaggerated and fixed with more or less permanency, we can readily see that the curvature may be much further advanced than we would at first suppose from a superficial examination, as in those cases in which we have a slight lateral curvature without an appreciable rotation. Although I doubt if such a thing can be as a lateral curvature with absolutely no rotation.

The necessity for dividing the weight about the center of gravity in order to balance the body in the upright position accounts for the distribution and effects of lateral curvature. As the normal contour of the spine is the necessary result of static conditions, a change in the normal relation in one part necessitates a change else-

*Read before the Indiana State Medical Association at French Lick, June 18, 1908.

where. If there be a primary curve convexity to the left in the lumbar region, there must be a secondary or compensating curve convexity to the right higher up, and if these curves be sufficiently pronounced there will be a corresponding appreciable rotation in either region. Thus we have the "S" shaped curve of scoliosis. These curves may divide the spine equally, or there may be one long and one short one. Occasionally we may have three distinct curves, or in rare instances the spine may be bent laterally into one long curve, "total scoliosis," which in childhood is often combined with general posterior curvature, and is peculiar in that the torsion of the vertebræ may be toward the concave instead of the convex side, as is usual, the torsion probably representing the early stages of the secondary or compensatory curve.

Not only the balance but symmetry of body is preserved by the compensatory curves. In case of one long curve, either lateral or antero-posterior, the balance is maintained only by swaying the entire body on the pelvis in the direction opposite to the distortion.

Etiology.—This is the most common of all deformities, though its insidiousness often allows it to develop to harmful proportions before it is recognized. In fifteen years, from 1885 to 1899, 3,252 cases were recorded in the out-patient department of the hospital for ruptured and crippled in New York, and during that time was only exceeded by bow legs, of which 5,030 cases were treated during the same period.

Sex.—"Lateral curvature occurs more frequently among females than males in about the proportion of four to one."—Whitman. Sex seems to exercise no influence in early childhood. Possibly the greater solicitude of the mother for her daughter who thus suffers as compared to a son, may be one reason why so many more are detected and brought for treatment, just as bow legs and knock knees are more serious deformities in a boy since his manner of dress does not hide his misfortune.

Age influences its development, but no time of life is exempt in the 3,252 cases just noted; 39.9 per cent. were less than 14 years of age, 48.4 per cent. were between the ages of 14 and 21, and 11.6 per cent. were more than 21 years old. These figures simply show the age at which the patients presented themselves for treatment and give little or no clew to the beginning of the deformity. Certainly those influenced by rachitis would naturally begin in early infancy, though they may continue to develop later in life. In a table prepared by Dr. Walter Truslow, Hospital Ruptured and Crippled, of thirty-seven patients

of six years or less, twenty-five were unmistakably due to rachitis, so we see this trouble plays no small part as a causing factor.

It is an easy matter to go down the line and suggest predisposing factors, but it is by no means easy always to point out the determining cause in each case.

1. Lateral curvature secondary to deformity elsewhere, as where one leg is shorter, or following torticollis.

2. Paralysis, particularly that of anterior poliomyelitis, along with its many other horrors, may, and often does, add this deformity to the others.

3. As to occupation, certainly no cause is more active as a determining cause than occupation, from the school girl at her desk to the stone cutter plying his trade, from infancy to age. Jean Val Jean was intelligent enough to detect the evils a habitual attitude due to their occupation had on the other prisoners in the galley ships, and was not slow to profit by what he saw and saved himself by using the same intelligence. When fathers and mothers and all concerned in growing childhood use the same good sense, lateral curvature will be a thing of the past.

4. Congenital lateral curvature is uncommon in infants otherwise normal, but beware of the rachitis. Those with a weaker spot and an entire framework as easily moulded as clay are easily bent in any shape and are certainly creatures of circumstances.

5. Heredity, though mentioned, is not easily connected with the deformity in most cases. The pranks that Nature plays in this regard, in blessing us with our ancestor's virtues as well as cursing us with their vices and deficiencies, are indisputable if not always explainable.

Symptoms.—Generally the first is the deformity. Pain may accompany or precede the deformity and is generally of a dull, dragging nature, and is often said to be due to pressure of the nerves caused by the curvature, but pain is often felt on the convex as well as the concave side, so that theory does not hold well. In extreme cases doubtless the above explanation would hold good.

Often weakness and awkwardness precede deformity. The writer recalls a case, a child of three that was brought to his office by the parents to see why the little fellow fell so often as he would run across the floor. A beginning lumbar curve was found which rapidly progressed from want of treatment.

Muscular coordination is often wanting and neurasthenic or hysterical symptoms are often present, sometimes culminating in all the un-

pleasant symptoms due to misplaced thoracic or abdominal organs in the cases of extreme deformity.

Diagnosis.—Scoliosis is a simple deformity, accompanied by the symptoms of disease. Unfortunately, too often the diagnosis is made, or rather the deformity detected, by the dressmaker or tailor. The doctor has had no chance to know of the trouble. The elevated hip or shoulder gives trouble when we demand something near accuracy in fit of our clothes. The inclination of the body to one side; rotation of the spine as shown by fulness on one side or flatness of the other; the curve best shown by the position of the spinous processes in the erect position; the lessened flexibility of the spine and range of motion of the shoulder joints.

Prognosis.—Doubtless there is a predisposing or preliminary stage, a stage of progression and a stage of arrest. All deformities of this class are more likely to progress during the growing period, so the later in life that the deformities begin the better the chance for the stage of arrest to be reached before great damage is done.

Cases seen in the preliminary or early part of the stage of progression may, under proper care, if the patient is in proper health, be completely cured, but if the muscular change has gone too far or if adhesions have formed, or the osseous changes have occurred, a checking of the deformity is all that can be hoped for.

Treatment of this class of deformities, like the education of children, should begin before the victim is born. Every child is entitled to a birth-right of a good, strong, healthy constitution, and such a guardianship of its early life as would have judgment enough to know and take interest enough to see that all is well with the child physically as well as morally. To secure all this is beyond our power, but we may give an occasional word of advice to those in charge of these children so that they may know better what is normal, and knowing that, know how to secure it and keep it. Seating of our schools has been and is sadly deficient. The child must fit the seat and not the seat the child in the present system of economies. This condition exists partly because of ignorance, partly because of indifference. Tasks beyond the strength and in no wise adapted to childhood must be abolished. Child labor in factories is going and must go. Good, healthy play grounds with proper equipment, both as a prevention and cure, must be furnished.

Whitman gives the following principles for the guidance of those who would deal with such cases:

1. To overcome all restriction to passive motion.

2. To strengthen weakened muscles, especially whose action is opposed to habitual deformity.

3. To insist on the avoidance of overfatigue and improper postures.

4. To support the weak part by a brace if deformity can not be corrected otherwise.

It would seem that these principles cover the ground pretty thoroughly, but it is much easier to give principles than to apply them. When the muscles that resist passive motion are not easily reached and the bodies of the vertebræ can not be affected, it is not so easy to overcome all restriction and passive motion.

The second principle is the most important in the curable cases unless the third be added to and classed with it, for nothing is more important than what is taught in the two combined, proper exercise and proper rest. Proper exercise, both passive and active, as far as the patient is concerned. Passive, as properly given massage and posture; active, all that is combined in proper movements and exercises. If one has a well equipped gymnasium at hand and at its head a good physical director to turn these patients over to, the matter would be simple; but only the few can get one or both and nearly every one has to meet and treat these cases.

The exercises illustrated and described by Teschner in the *Annals of Surgery* and used by Whitman in his excellent work on orthopedics are fine, but are more elaborate than most can master untaught, and few can get the proper instruction. The writer has had good success in dorsal and lumbar curves in having the patient swing from a pole or rings by the hands. In case of high dorsal or cervical curve a halter fastened under the occiput and chin with an elastic band fastened to the pole above gave the necessary extension. This has been used in both antero-posterior and lateral curves.

The necessity for proper rest at proper times can not be too strongly emphasized and avoidance of improper posture is absolutely necessary if aught is to be accomplished.

The last principle is to be shunned where possible, but in infants to overcome deformity and in those where support or such correction as it may give to aid exercises, and lastly in those to whom there is no other course open, the mechanical support is a necessity.

DISCUSSION.

Dr. H. R. Allen, Indianapolis: Any paper on scoliosis is a good paper. And there is entirely too much scoliosis and it is largely because of

some kind of fake modesty that seems to be not to look at naked little children. You will save them a great deal to see that their pelvis is square and level. That is the foundation of the spine. The second thing is to look after the spine. There are two or three things in regard to the human spine not to be found in text books. Of all the creatures, the human being is the only one that has ever ventured upon the difficult task of balancing. In the spinal column a series of cubes rest upon a series of spheres. You have your vertebra with a double convex disc of cartilage, and this spine is all the while held in the perpendicular position, and man is the only animal that has ever attempted it. Mice and elephants and other creatures have been taught to assume an upright position for short periods, but the biggest apes we have walk on the first three fingers of their forelegs, and this approaches nearest to the human being. The rock seal goes down and sleeps in an upright position, but is surrounded by something that acts by hydraulic pressure. The bat hangs with its hooks on rock ledges. There is no creature with a tilted pelvis but what the spine is going to come on up and provide for some point of balancing. Dr. Ross made frequent reference to local irritation of the spine. I will show you what I mean by the rotation theory. I found that the theory I had learned in the books would not answer, and so I built a machine that would work in any weather and anywhere. (The doctor illustrated on the blackboard his rotation theory). So there is no use of their talking about the rotation of the vertebra and no use of talking about scoliosis unless the curve and the rotation are as I maintain they are. And in scoliosis they had better not use instruments until they change their scheme of thought a little bit. The Doctor spoke of complete scoliosis—I have yet to see a case of complete scoliosis. There is no more complex thing than that presented by the spine, muscles and ribs attached thereto in all medicine and surgery. Proper exercise—I do not know what it is. I do not know any exercise calculated to produce any correcting effect but what you will find a corresponding point where you will find your conditions reversed. In the Orthopedic Society they varied in their treatment of scoliosis, and will keep on varying. They varied on the treatment with the plaster of Paris casts. In that you have a hump here and a depression there. Likewise with the braces; they were properly condemned because while pushing on one place they were pulling on another. They must change their process. What good is twenty or thirty minutes of proper exercise going to do when all the rest of the time is having a develop-

ing influence, and gravity is the biggest force? Another thing, swinging by the hands is recommended to correct scoliotic curves, but swinging by the hand is only lifting the weight off the spine.

When you come to swinging the patient by the arms I want you to notice what you do. The latissimus dorsi is the biggest muscle in the body. It comes from the pelvis and the processes of the spine and is attached to and swings the arm. If you want to lift the pelvis up the latissimus is the best thing to do it with. Your attachment in front is the rectus. If you want to pull up the front part of the symphysis catch hold of the upper part of the rectus and do it. If you swing them by the head then you come down to causes and do something. Catch them and swing them by the chin and the occiput. My treatment depends on correcting positions under strain, and the application of a brace of this sort built along progressive lines to carry off the weight by the chin and the occiput to keep the deforming influences out of the question and put them in exercising machines, which will shove the vertebrae in such a manner as to untwist the revolution that has occurred. It wouldn't be fair to go into details. Every one of these cases must stand on its own feet. You must measure them from time to time and find out what you are doing. There is one machine that will measure them just as the oculist can measure his eye cases. But remember when you put traction on the spine do it with the chin and the occiput. Show me one muscle that will pull the spine one way and I will show you several that are pulling harder the other way.

Dr. David Ross, Indianapolis (closing): There is no question but what great good comes from extension of the spine, and yet often times in these exercises in which the patient swings, whether from the surrounding muscles or not, you do get good, and without being aided by them, by swinging them from the occiput and chin alone, you can not, as in deformity such as club foot, get at the part offending.

OBSTRUCTION OF THE BOWELS FROM TRAUMATISM.*

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INDIANAPOLIS, IND.

Traumatism of the abdomen is a frequent source of intestinal obstruction. The obstruction may be mechanical or reflex. If mechanical, it is due to rupture of the intestine, due to pressure

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upon the intestinal cavity by hematomas. It may bring on violent peristalsis which may cause a kink in the bowel. If it is reflex it is more probably due to injury of the nerve centers within the abdomen, which brings on paralysis.

In examining a patient for traumatism the utmost gentleness must be employed lest the surgeon's fingers or the patient's movements should convert an incomplete into a complete rupture or induce a renewal of hemorrhage.

Exact diagnosis may be impossible. The absence of all acute symptoms, or of symptoms distinctly pointing to a visceral lesion, is not enough to justify the surgeon proclaiming the injury unimportant. For example, there may be nothing to indicate soon after the injury such a severe lesion as rupture of the intestine, but in a few hours the onset of acute peritonitis will reveal the gravity of the case. In many cases, therefore, where an actual diagnosis of visceral lesion can not be made, an exploration should be made. This is particularly true where rupture of the intestine is suspected and where the injury in the solid viscera would lead to severe hemorrhage.

The most pronounced symptom is shock, which is most intense immediately after the injury. It is an indication of interference with the nerves, and is usually most intense when the traumatism is in the upper half of the abdomen, especially if the stomach is full, though it may be absent or very slight and transient in rupture of the intestine.

Hemorrhage may be of the concealed variety, and the general signs are acute anemia and shifting dullness in the abdominal cavity, though it is not always advisable to move the patient from side to side in hemorrhage of the abdomen. Percussion should be made very carefully and lightly, not only to avoid giving pain and exciting muscular spasm, but the force of the blow may possibly complete an incomplete rupture of the intestine or blood vessel. Rupture of the abdominal wall is an extremely important sign in visceral injury. When the patient can take a full deep breath without pain and the abdominal wall is everywhere quite soft to the touch, it is almost certain that there is no visceral injury or peritonitis. Pain is the symptom of all injury. When it is intense, and increasing spontaneously without any movement on the part of the patient, and is fixed in one spot and radiates thence over the belly, it becomes of serious import.

Vomiting is another very frequent symptom. When the patient receives a blow upon the abdomen soon after a meal, vomiting to the extent of emptying the stomach usually occurs and is of

no serious significance, but when the act is oft repeated, and particularly when the ejecta contains blood, it is an important sign of visceral lesion. The significance of passage of blood by the bowel is obvious, and it may be pointed out if bright blood is passed as a result of abdominal injury, it points to a lesion of the colon, while an altered condition of the blood (tarry stools) would show that it comes from some loop of the alimentary canal further removed. The most frequent and most violent sequela of abdominal injury is peritonitis, which may result from a perforation of any part of the alimentary canal, or from a less severe injury which permits pathological organisms to traverse the intestinal wall and infect the peritoneum.

Peritonitis is a frequent cause of intestinal obstruction, and when the obstruction arises from this cause surgical interference is demanded. Probably the most frequent cause of obstruction from traumatism is adhesive inflammation. Contusion of the peritoneal coating of the bowels and abdominal walls causes adhesive exudate to be thrown out, which agglutinates the bowels into masses and frequently forms adhesive bands which constrict the bowel, producing an internal hernia. These conditions have all the characteristic symptoms of hernia produced in any other position. As an example, I was called to attend a man who was pinched between two cars. At the time of the injury he had profound shock, temperature dropped to $96\frac{1}{2}^{\circ}$, pulse small and thready, with a leaky skin. The man recovered without any symptoms of peritonitis and was discharged from the hospital at the end of a week or ten days. Some two weeks afterward I was called to his home in the night and found him with the characteristic symptoms of intestinal obstruction. He was immediately removed to the hospital and an abdominal exploration made, when we found a knuckle of bowel had slipped under an adhesive band which had formed from the promontory of the sacrum, into the right iliac fossa. The obstruction was complete, the bowel was strangulated, and necrosis had already set in. The strangulation was relieved and the man has made an uneventful recovery.

Probably the most serious obstruction from traumatism with which we have to deal, and the one which the surgeon fears the most, is post-operative ileus. This condition is not as well understood as it will be, and seems to be due, first, to nervous shock, producing a paralysis of peristalsis. This allows the contents of the bowels to take on active fermentation with great distention, which further complicates the paralysis. This

condition promotes absorption of toxins, and the patient soon becomes thoroughly poisoned. Unless the condition is speedily relieved death will surely ensue.

The treatment of this condition is one which puts a grave responsibility upon the attending physician. If the bowel can not be moved by laxatives, then there is only one recourse, and that is surgical interference. Open the abdomen, incise and drain the bowel, washing out the contents of the intestinal tract, getting rid of gas and the fermenting fecal matter. This is rather a radical procedure, but is advocated by some of the best surgeons.

Kocher advocates opening high in the jejunum and low in the ileum, washing the gut through and through, and closing the opening at the termination of the irrigation.

Munks, of Boston, in the last copy of *Annals of Surgery*, has an article upon this subject, in which he states that he has not been able, in experiments upon animals, to wash the whole of the small bowel through the high and low openings, but states that he has been able to cleanse this tract through some three openings: open high in the jejunum and make a middle incision at the upper end of the ileum, washing out the upper part of the tract; then, closing the upper opening, make another incision low down in the ileum, using the lower opening in the first washing for the high opening in this second washing. In this manner he has been able to cleanse the small bowel and also force the water through the ileocecal valve into the colon.

Dr. Haslam of Fremont, Neb., as far back as 1902, reports cases of obstruction treated in this manner. He reports a boy, fourteen years of age, suffering from a severe attack of intestinal paralysis following a relapse of appendicitis. A loop of the bowel as high up as possible was drawn through an opening in the abdomen and incised. Quite a length of bowel was drawn through the opening and an incision low down was made. The bowel was flushed out and the opening in the bowel stitched up and the bowel returned to the abdomen, the patient recovering.

Dr. Pond, of Brooklyn, also reports a case where he opened the abdominal cavity and irrigated the lower part of the bowel down to the ileocecal valve. He flushed the bowel out with hot saline solution and thoroughly unloaded it. He stitched the open bowel into the wound and kept up the irrigation for several days.

I have to report a case of my own in which obstruction followed a case of pus appendicitis, where I had paralysis with great distention, and

was unable to unload the bowel by any medication tried; high colon flushing, eatharsis of saline and croton oil, injection of hydrobromate of eserine, all failing to produce peristalsis or get any motion whatever. The abdomen was not opened at the old wound but in the median line, for fear that there might be some contamination still lingering in the old pus tract, which was being drained. The bowel immediately appeared in the wound, and when brought out on the abdomen we found it largely distended, the peritoneum quite congested, adhesive exudates being thrown out and more or less agglutination having taken place. These adhesions were broken up and the bowel was opened as high as possible and found to be filled with gas and fermenting liquid. This portion of the bowel was washed in both directions as far as it was possible, but I found it impossible to bring about contraction of the lower part of the bowel which was out upon the abdomen. The upper incision was now closed and the bowel was stripped gently downward so as to force all the contents as low in the bowel as possible, and compression forceps put upon it. An incision was now made in the small bowel and it was again drained of fecal contents. As we proceeded down the bowel we found the contents dark, liquid and very foul. This bowel was thoroughly drained by stripping upward toward our compression forceps, filling repeatedly with hot saline solution, the salt solution being forced by compression down the bowel, afterward returning to the opening. After as thorough cleansing as possible, the wound was closed by a double row of Lembert sutures and the bowel returned to the abdomen. Before closing the abdomen a colon tube was passed into the lower bowel and by putting the hand in the abdominal cavity through the opening and guiding the tube into the colon we were enabled to pass it almost to the first flexure. The colon was filled with a solution of epsom salts, the abdomen closed with drainage and the patient put to bed in the Fowler position. In a few hours the lower bowel was thoroughly unloaded, a great amount of gas passing, and the patient made a lingering and tedious recovery, but without any further ileus.

I am firmly of the opinion that many of these cases of post-operative ileus could be relieved by thoroughly washing the intestinal tract. I can see no objection to the operation, as, under proper precautions, it is certainly safer than to allow the ileus to run its course, as death almost invariably follows.

In closing, I would state that all cases of obstruction due to traumatism should be operated

promptly, before peritonitis has set in, or the patient has become weakened from loss of blood or intestinal absorption has taken place and the patient has become thoroughly poisoned. I believe, after reading the article by Munk, that I shall be tempted to operate if the patient gives any promise whatever of living to come off the table.

DISCUSSION.

Dr. T. B. Noble, Indianapolis: Every case of intestinal obstruction is a case which puts the life of the individual in imminent jeopardy, and death will occur unless the condition be promptly diagnosed and properly treated. In personal experience, by all odds my greatest mortality lies in this class of cases. I believe, as a rule, every one of these cases ought to get well, just as every case of appendicitis ought to get well, because there is a time if these cases be properly interpreted, properly analyzed and proper treatment instituted they will uniformly recover. They must be treated promptly. The death angel is busy from the time the obstruction is complete and we have no time limit in which to operate. I have seen cases recover in six weeks and in six days following an obstruction, and I have seen them die in twelve hours. My experience is that I am not called in to interpret symptoms of obstruction of the bowels, but to interpret symptoms of impending death, symptoms of exhaustion and collapse resulting from peritonitis or some other sequential pathological condition, the outgrowth of the obstruction which occurs probably days before. It is a shame that in these cases we encounter gangrenous intestine. The day is now here when we should study more carefully the early symptoms of this condition. These are papers that should be over in the other section, before the men who do not often see inside the abdominal cavity and do not appreciate the seriousness of the changes that so rapidly occur following an obstruction. Nature's first cry for relief from this fatal malady is pain, and if doctors properly interpret this first cry they will relieve the pain and we won't have intestinal necrosis, we won't have general peritonitis and but very few deaths from this terrible disease. It is the pain from impaired peristalsis, pain from obstruction, pain that is colicky in character, it is severe, it refuses to be relieved. Then how often when we are called do we find that the pain has ceased, an obtundation of general character, a receding abdomen, a leaky skin, weak pulse, cyanosis over the abdomen, and we are called now to operate as a last resort. We should be called in when they are having their early pain. When it

comes to the management of these cases, that depends upon the individual experience of the operator himself, the environmental condition in which the patient is, together with the pathological conditions that obtain at the time he is called into the case to do his operation.

Dr. T. C. Kennedy, Shelbyville: Too frequently we come to these cases to find they have been relieved by morphin, and there is a sense of security felt by the patient and his friends and they refuse operation, as occurred in a case where I was called recently. But, as has been well said here, these cases should be operated early, as soon as the condition is diagnosed, and it does not make any difference whether we diagnose correctly a volvulus, an intussusception or whatever it may be, but as soon as obstruction is diagnosed laparotomy should be performed at once. And, as Dr. Clark has said, I do not believe it is well to hunt for the obstruction, but drain the bowel and wait for improvement in the condition of the patient. In many cases when the surgeon is called the patient is in collapse, the pain is gone and the patient is in a profuse sweat and when even an operation would no longer be of service. But I believe we would be warranted, no matter how extreme the condition, in attempting to relieve the condition by operation.

Dr. E. D. Clark, Indianapolis: I did not refer to my personal experience except to say when I am called in the vast majority of cases the patient has been so greatly intoxicated by the absorption of poisons from the intestine that it is absolute folly, almost, to attempt operation. It is my belief, and I think is the belief of every operator, that if these cases could be gotten soon enough they could be relieved of their trouble.

Dr. J. H. Ford, Indianapolis: I believe the surgeon is not in position to decide when an operation is futile. While it is desirable and extremely important to have early recognition of the conditions obtaining, still I do not think a man should refuse to operate on a patient in a reasonable stage of collapse, because cases have been recorded where the alimentary tract has been unloaded and cleansed and the patient has recovered. The hunting for the obstruction is serious business. It is easy to recognize, as a rule, because above the obstruction you find a distended bowel and collapsed below; but the trouble is that if the obstruction is low down we have such a mass of intestine that it is almost impossible to find it. So I believe the thing to do is to relieve the bowel of the material that is poisoning the patient and Nature will come to the rescue.

THE RELATION OF PHYSICIANS AND DRUGGISTS.*

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The universal recognition of pharmacy as a science and a profession is the dawn of a new era, which, consequently, gives greater dignity to the relationship between physicians and druggists. The subject is a broad one, and yet much that might be said is embraced in the following four propositions: First, the relationship should be professional; second, trade relations should be distinct and separate; third, obligations on either side should be those of a professional character; fourth, the ethical relations of physicians and pharmacists should be, as far as possible, the same as those of physician and physician. These are sufficiently axiomatic to make a discussion of them in detail unnecessary.

Contributory to the betterment of the conditions of pharmacy are both the state and the non-state schools of pharmacy and the special departments in many other institutions of learning. The progressive states have passed laws regulating the practice of pharmacy, so that now pharmacy is given deserved credit among the professions. As a result the present generation of druggists are pharmacists and no longer bear a relation to the drug-store conditions that existed several years ago.

While it is proper and right that there should be a dignified relation between physicians and druggists, yet the former has no right whatever to dictate the method by which a store should be conducted, although he may feel like entering an objection if there is a violation of the unwritten law of ethics. The physician may recommend to his patient a conscientious and faithful druggist, but he should never depart from the method of right and equity to do so to the exclusion of others who are equally competent.

A physician has a right to always expect courteous treatment, which applies equally well to his patients; and the druggist has an equal right to expect the same in return.

I readily see wherein an unwise druggist might unintentionally cause conditions that would be a mutual detriment; to discuss, with the members of a family, a prescription in reference to its merits and intents, rendering an opinion as to its value, would be unethical, and, furthermore, it is not a part of his profession to form a judgment of the propriety of a prescription.

That either one should not speak disparagingly of the other applies to both physician and druggist.

Occasionally some proportion of the prescription does not seem quite clear to the compounder, and rather than depend upon his own judgment the pharmacist seeks information from the author of the prescription, which naturally reacts to the credit of one or both of the parties interested. Upon this point the pharmacists of some localities are very particular and this method is commendable.

I am inclined to take rather an optimistic view in reference to pharmacists frequently wearing the garb of a physician and engaging in the practice of medicine which their license does not entitle them to do. Nor do I believe that simply to recommend a remedy is close to counter prescribing. To suggest an agent for the relief of pain or to act in a case of emergency so far as a pharmacist's knowledge will permit, is surely not objectionable; but to inaugurate a line of treatment, thereby usurping the powers of others, is an injustice to physician and to patient.

I do not believe that the cry of substitution of the "just as good" has strained the relations of physicians and druggists. It is a medium which has been overworked by the advertiser. Some few manufacturers have ridden it as a hobby-horse until it has become wind-broken. There may have been some guilt, but the innocent have been made to suffer.

The pharmacopœia recognizes certain preparations and some trade preparations are identical with them. There is every reason why the physician should give the standard the preference, but if a prescription contains the trade preparation and a druggist uses the standard it is substitution; yet it is a violation of the letter of the law and not the spirit. There can be no question but that a prescription should be filled as written unless a conference is held with the prescriber and permission given to do otherwise. The druggist is in a position to frequently furnish information, and relations should be such as to warrant such a conference. The interests of physicians and druggists should be mutual and professional men should be honest in their work and there is no reason why conditions should be otherwise. If our confidence is weak, let us increase its strength.

One of the greatest evils that I recognize is the method which the public has of calling upon the druggist for remedial agents to relieve a cough. Some do this simply for the purpose of avoiding a physician's fee, while others form a judgment

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that it is of too trivial a nature to require the attention of a physician. Cases of this kind unquestionably are frequently cases of tuberculosis which may be carried to a period beyond redemption, and if they had been under the care of a skilled physician at the onset a cure would have been effected. I call attention to this point, which in no sense is a criticism of the druggist, but to emphasize the fact that if the druggist will stop the imposition of the people upon him he will be as great a factor as many health officials in eradicating tuberculosis. This is true because what appears to be a simple cold is frequently the forerunner of a fatal issue, and also because curative methods depend upon an early diagnosis.

I have frequently been told that the treatment of venereal diseases by the druggist is a commonplace practice, but I do not know of a case in point, and I would be loath to believe that the members of a profession of pharmacy are guilty of anything of this character; however, I can readily see that if such a method were in vogue there would be a possibility of a larger number of complicated cases visiting genito-urinary specialists for a final cure, and perhaps furnish a few sterile women, if not worse, for the gynecologists; and yet with the confidence I have in the best class of pharmacists I am impressed with the idea that they use the skill that rightfully belongs to them as members of the profession of pharmacy without a stain of this character upon their garments, and if there are a few exceptions others should not be condemned, but the guilty deserve punishment.

The pure food law will react to the advantage of the two professions under consideration, and the department store method will wane under the restrictions of this law and it will soon be known that the place to get standard drugs is at a standard drug store. The topic is worthy of further consideration, but time forbids.

Some members of the medical profession have been in the habit of using preparations in the treatment of disease which were on par with an ordinary patent medicine, which in no wise increased the respect of the practitioner from the standpoint of a skilled pharmacist, nor was it conducive to harmonious relations.

There is now a wave of reform movement in progress, and on April 7, 1907, the Indianapolis Medical Society issued to the physicians of Marion County the following address, a copy of which was sent to every physician in the county. It is as follows:

It is well known to all who keep themselves informed upon the progress of things medical that an earnest and determined movement has arisen throughout this country and the world looking to a reform in the prescribing of medicines. The advertising and the more or less irrational and unscrupulous promulgation of various types of proprietary medicines and nostrums has to such an extent beguiled, deluded, degraded and even debauched the profession that the situation has become intolerable to a liberal and self-respecting calling such as ours.

This matter, as you know, has been officially taken up by the American Medical Association, and its Council on Pharmacy and Chemistry is doing a great work in a preliminary clearing of the field. We commend this work, as published from time to time in the association journal, to your constant and serious consideration.

Influential representatives of the public press, daily journals, widely-circulated monthly magazines and scientific publications are not only endorsing the campaign against the ordinary "patent medicines" and promiscuous and irrational self-drugging, but are also seriously looking into and criticising this evil of the use of "professional patent medicines." Plainly there is a loud call for an awakening of the professional intelligence and conscience in this matter, and an equally urgent call upon our integrity and self-respect, in view of the fact that our derelictions are being scrutinized, not only among ourselves, but among those upon whom we must depend for recognition, respect and support.

It is idle to seek to lay the blame upon others; upon too enterprising and unscrupulous manufacturers, upon the commercial necessities of medical journals, or upon the druggists whom we have been chiefly responsible for leading astray. The fault lies chiefly with us in that we have been false to our own ethical principles and have been seduced away from our own recognized standards.

The reform must begin and continue among ourselves. Then only will the other guilty ones—the manufacturing pharmacists, the medical journals and the druggists—be willing and compelled to follow us. We must come back to a recognition and appreciation of what is meant by rational therapeutics, by a rational simplicity in the prescription of drugs, by rational professional independence in medical practice, and by rational pharmacologic standards. Having adopted a *Pharmacopoeia* and *National Formulary* as our chief guide, we should follow the earnest advice of our appointed authorities in clinical medicine and pharmacy, avoiding the use of unnecessary and meaningless proprietary preparations and the worse nostrums, as far as possible, prescribing and thus encourage the

druggist to dispense according to the Pharmacopeia.

At a recent meeting of this society this important subject was freely and helpfully discussed in conjunction with representative pharmacists of the city, the pharmacists expressing their willingness and desire to follow the physicians in this form of prescribing, and a committee was appointed to formulate an expression of combined medical and pharmaceutical conviction and advice. Therefore:

Resolved, That the Indianapolis Medical Society does hereby record its approval and endorsement of the present movement for reform in the prescription of drugs; and,

Resolved, That the Society does hereby call upon its members to give heed and serious consideration to this reform; urging upon them the conviction uniformly and repeatedly expressed by the master-minds of clinical medicine, that the habitual and routine prescribing of meaningless proprietary medicines and nostrums is degrading to rational therapeutics, lays our calling open to a charge of insincerity in its claim as a liberal profession, makes insignificant its criticism of the ordinary patent medicine business, deprives it of that public esteem and confidence which is its due, belittles it and us in the eyes of the pharmacist, and, sooner or later, almost invariably compromises the otherwise thoughtful and capable physician in his diagnosis and treatment of disease.

You are, therefore, urged by this society to cease prescribing unworthy and irrational remedies and to act in conjunction with your local druggists in bringing about a new order of scientific prescription writing. . . .

Failure to participate in this reform movement lays us open to the charge of either indifference or of inability or unfitness to scientific practice and to prescribe medicines.

The medical profession is trying to teach the public the importance of hygiene, sanitation and preventive medicine, and we must have the help of the pharmacist. He is in a position to render service which will make the physician's work more effective and thereby he becomes a public benefactor.

I am impressed by what I believe to be a fact—that it is the duty of the members of the medical profession to recognize the ability of the pharmacist to a greater extent than we now do. He is not simply a tradesman, but after years of study the pharmacist of to-day is fully able to meet the demands of the physician; do we justly give him the opportunity? If our knowledge of materia medica and therapeutics is deficient, if we are rusty or indolent, so much so that it is easier to prescribe a nostrum, then we do not utilize his skill. If we have been unconsciously drifting to a port of danger, let us resolve to steer

clear of it, and after all it will not be disadvantageous to now and then refresh our memories concerning the unwritten law of ethics between physicians and pharmacists.

THE RELATION OF THE PHARMACIST TO THE PHYSICIAN.*

J. R. FRANCIS, PH.G.

INDIANAPOLIS.

In order to better understand what should be the relation of the pharmacist to the physician, it may be well to review briefly the history of medicine and pharmacy and the origin of the two professions as separate practices.

During the Galenic period the art of medicine consisted chiefly of the endeavor to discover remedies for the cure of disease. We note the superstitions and mysticism which prevailed in the amulets and other charms; the famous "Anodyne Necklass of Galenus," and so on. At this time it naturally required that the physician would prepare, compound and often collect medicines which he employed. Thus was developed the vegetable materia medica.

During the latter part of this period the search for the "elixir" was also participated in by the alchemists, in connection with the "philosopher's stone," which when found was expected to transmute baser metals into gold and also to supply the key to everlasting life.

While the alchemists did not realize their ambitions, their labors resulted in a vast amount of experimentation upon which the science of chemistry subsequently developed.

The Galenic period was succeeded by the Paracelsic period, commencing about 1600 A. D., which introduced mineral substances in medicine, beginning with mercury and antimony, and with their introduction the materia medica was vastly augmented.

The preparation of chemical substances required more time than the physician could devote, and thus was developed a class of specialists who manufactured these chemical substances and who also relieved the physician of himself preparing all other medicines that he used.

The introduction of chemical substances and medicines into commercial use was soon taken advantage of by laymen and others for criminal purposes. Thus we have the "era of the poisoners," one of the darkest pages of the middle ages.

*Read before the Indiana State Medical Association at French Lick, June 19, 1908.

We are reminded here of the woman Tofana in Italy who, at the time she was executed, confessed having murdered several hundred persons by poisoning them with arsenic. This name is also a ghastly reminder of the New England woman, Toppa, who only a few years ago confessed having murdered some thirty persons by administering poison to them. Poisoning became so common a practice that it became a profession, and was the common practice invoked to get rid of undesirable citizens, whether through hate, jealousy or greed. Beginning with the sixteenth century the authorities in all countries of Europe employed rigid means to stop this practice. Pharmacies under the strict supervision of the authorities were established, and certain exclusive privileges to the pharmacist attending controlled competition through restriction of trade. As a result there developed a class of highly educated and trained apothecaries who, assured of a life tenure, were largely independent of commercial considerations. These things are possible, however, only in countries where the code is supreme as distinguished from those governed by the common law. In the latter such regulations and restrictions must await the slow progress of enlightened public sentiment and the treacherous processes of political compromises before they can be enacted into legislation. While commercialism is allowed to play such an important part in the handling of medicinal agents, the relation of the pharmacist to the physician is difficult to define.

The medical profession has its code governing relations between its members and the public, but there is no written code concerning the relations of the pharmacist. However, the latter's relation to the physician may specifically be stated as follows: (1) The attitude of the prescription. (2) The recommendation of medicines. (3) Adherence to the standards of the U. S. P. and N. F. (4) Professional courtesy.

Since many physicians have quit writing prescriptions, because they do not feel warranted in writing one prescription which may come into use for a whole neighborhood, or from the dangerous effects of potent or habit-forming drugs, following unwarranted repetition of compounding such medicines as were designed only for a particular person for a particular period, I would call attention to the recent conclusions of a joint committee of the Chicago Medical Society and the Chicago branch of the American Pharmaceutical Association, expressed in their declaration as follows:

First.—The prescription is an utterance of the prescriber who alone should direct and control its employment. It should, whenever practicable, carry the name of the patient, the age in years if a minor, and the date when written.

Second.—The pharmacist who prepares the medicine should retain the prescription as reference for his services and as record for a certain limited period—not less than five years—for the protection of the prescriber, himself and the patient.

Third.—The medicine prescribed should be supplied not more than once on the same prescription: (1) If ordered by the prescriber, "Not to be repeated"; (2) if containing narcotic or habit-forming drugs; (3) if called for by some person known not to be the original holder.

Fourth.—Copy of the prescription may be furnished and should be written on an especial blank, containing a declaration that it is a copy of a prescription which has been delivered to the original holder and is not to be refilled except on order of the prescriber. The copy is made without recourse to possible error.

To my mind these requirements are exceedingly reasonable.

Theoretically, it might be said that the pharmacist should not recommend any medicine, but suggest that his patrons seek the advice of a physician. But this is impracticable because the average layman thinks he knows as much about medicines as does the doctor. Incidentally, it might be added that this attitude of the layman is in no wise improved by the observation he often has the opportunity of making, in the fact of physicians recommending proprietary pharmaceuticals to him which, through the trade name and literature accompanying, offers opportunity of too much familiarity. Besides, in this great country every man, woman and child enjoys the privilege of recommending medicine for every ailment, and while the laws require a high degree of qualification and license for the practice of medicine, any old woman can set up as a healer, and any adventurer with a few dollars can organize a chemical company and dope the community by the wholesale under the apparent sanction of the government; that is, by the natural although wrong interpretation of the guarantee label of the food and drugs act.

It is, therefore, exceedingly difficult to draw a line where the pharmacist's privilege begins or ends, except for at least one well-defined principle, namely, he has no right to diagnose.

I should say that he has the right to supply the articles of the poison and narcotic drug schedule only under such restrictions as required by law. He should never recommend any patent medi-

cines, display them or allow his name to be used in connection with them. As to what extent he shall entirely refuse to handle them will be a matter of individual taste or judgment.

As to patent medicines generally, and I refer to those articles exploited on the public through the press, in my judgment the marketing of them as practiced is fraught with so much danger as to overshadow all the good to which they may lay claim. So far as the layman's personal interests are concerned, there is about as much judgment used in this self-medication, especially for obscure ailments, as there would be in his trying to pilot a modern locomotive over a piece of busy railroad track with which he was unacquainted. The pharmacist, from the nature of his position toward the public, ought to be honest enough to protect his patron, even against his credulous insistence, and to point out that when medication is needed for obscure troubles the only proper thing to do is to consult the physician.

That uniformity may be secured in strength and dosage of medicines, every civilized country has established a standard through its pharmacopeia, a work compiled by joint medical and pharmacal authorities. The United States Pharmacopeia, as presented to us in the last or eighth decennial revision, fixes the standards for the identity, purity, strength and quality and gives directions for the preparation, valuation, preservation and compounding of medicinal substances. For the first eighty-eight years of its existence the U. S. Pharmacopeia was not legally recognized by the government, and then not until the enactment of the Food and Drugs Act in 1906. The National Formulary is a work issued by the American Pharmaceutical Association, compiled by a committee on revision of this association. It is a compilation of some 500 formulas and is now in its twentieth year. The National Formulary is now likewise recognized in the Food and Drugs Act on the same basis as the Pharmacopeia. It is the consensus of opinion that the present U. S. Pharmacopeia is the most complete of the world's pharmacopeias, no less an authority than Dr. L. F. Barker of Johns Hopkins having recently expressed his judgment to that effect.

The medical profession and the pharmacists of our country have drifted away from these standards of authority in recent years. To my mind one reason for this is that it is easiest to follow the line of least resistance. The latter has been supplied through the medium of the large manufacturer, and myriads of lesser ones, in their specialties, so-called specifics and ready-

made prescriptions, chiefly because to them it is a profit-earning method. Besides this great flood of specialties, etc., sampled by the physician and vended chiefly through the pharmacist, we also have to contend with the small manufacturer who sells the physician direct, often quoting prices below actual market value and throwing in a few shares of stock beside. This kind of thing, generally speaking, has gone on to the point where it would seem both physician and pharmacist have lost sight of their true interests, individual and mutual.

The young physician starting in practice, often but meagerly equipped so far as pharmacology and therapeutics are concerned owing to the shortcomings of his alma mater in this respect, and feeling the need of something, somewhere, to lean upon, naturally listens to the siren voice of the neatly-dressed and artistic detail man and promises to prescribe. The pharmacist in turn meets this same genial gentleman, who bombards him with a long list of names of physicians who are going to prescribe his specialty and, as a consequence, stocks up the pharmacist.

At this point, it may be properly asked, what are the real objections to proprietaries, secret formulæ, after all? There is really no objection to them if a better knowledge of medicines than we have of them is not required, or if something better is not desired. Indirectly, however, the use of them as a practice is very objectionable, possibly most so because they are in direct opposition to the liberal principles upon which true medicine and true pharmacy are based; their use encourages or falsely rewards pretense and undermines those fundamental processes which encourage true pharmacologic and therapeutic attainment; and it certainly can not be said that the use of such things is in any way consistent with the extremely precise methods employed in all other departments of medical and surgical practice.

In my judgment, it has come about largely because it is easiest. I do not wish to be understood as undertaking to dictate to, or to criticise the medical profession for having, by their method of prescribing proprietary remedies, assisted in the vending and the use of such agents. Rather, I wish to acknowledge the fault of the pharmacist and to shoulder a full measure of blame; for is not the pharmacist in his true sphere, the helper, the assistant of the physician and the outer-guard, as it were, toward things pharmaceutic?

That we have drifted far, very far, from the proper channel is evidenced by a glance through

the revised or fourth edition of the "Propaganda for Reform in Proprietary Medicines," being a reprint from the *Journal of the American Medical Association*. In this we find article after article, with which, after years of handling and of use, we felt perfectly familiar, fallen by the wayside as a result of the scrutiny of careful examination. Page after page of evidence that the true reason for all this heraldry by tongue and pen of the wonderful discoveries of new mixtures and combinations, has not been any desire on the part of the makers to aid and assist in establishing true therapeutic standards, but to the contrary, has been purely a selfish and commercial one. To encroach upon the threshold of sickness and disease with falsehood and deceit, under the guise of being a helpmate to the physician, is an extremity in commercial practice which is certainly profound in its dishonor.

If time permitted I should like to call attention in detail to the work being done by joint committees of medical societies and local branches of the American Pharmaceutical Association, but you doubtless are all more or less familiar with this subject, which has for some time past been presented through the columns of the *Journal of the American Medical Association* and elsewhere.

A few days ago I received, upon request, from the secretary of the Kentucky State Board of Health a copy of the reply postal card which has been sent all members of the Kentucky State Medical Association for their signature and return, bearing the following obligation:

"I hereby agree with the other physicians of Kentucky that I will, as far as possible, use only those medicinal preparations which are described in the United States Pharmacopeia and the National Formulary, and of other medical preparations will only use those which have been approved by the Council on Pharmacy and Chemistry of the American Medical Association, and that I will not subscribe for nor receive from the postoffice any medical journal which advertises nostrums or proprietaries which have not received such approval. I sign this with the understanding that I intend doing my part toward freeing the profession and its publications from the use of nostrums and useless proprietary medicines."

My understanding is that with true Kentucky enthusiasm, the members have responded one and all.

Throughout the land the propaganda of the new reform is active. I am told by Dr. Barnard, State Drug and Food Inspector of Indiana, that the conditions throughout the state have vastly improved as to quality, strength and standards of medicinal articles carried in drug shops. Upon

inquiry of commercial representatives of the pharmaceutical manufacturers I am told that the pharmacists of the state, having awakened to the sophistry and fraud which heretofore has been practiced upon them by the vendors of cheap goods, have turned almost entirely to the leading manufacturers who are reliable. It seems to me that the physician should understand the import of these facts as a safeguard to himself and against the vendors of unreliable goods sold to him direct.

In conclusion, I believe the plan which in substance contemplates a better understanding between the physician and pharmacist, and a closer leaning toward those medicinal preparations which are legitimate, is the correct one. Personally, I believe we should welcome any and all opportunity of a proper kind for a better understanding between the professions of medicine and pharmacy. We may not hope to accomplish so much as has been done in Europe by the hard hand of the law, but it is by the kindlier offices of affiliation and fraternity; of encouragement and helpfulness from the stronger to the weaker, that we must look for betterment and for truth.

A PLEA FOR STATE CONTROL AND TREATMENT OF DIPSO MANIA, IN- EBRIETY AND DRUG AD- DICTION.*

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Since Cain, in the very dawn of creation, after having slain his brother Abel, asked "Am I my brother's keeper?" men in all ages have been answering that question in the affirmative. If not in word, in act and deed. At the present time we need only to look at the vast amount of money expended annually besides the self-sacrifice and human suffering entailed in missionary work—medical and otherwise—besides the fraternal organizations and national, state, county and municipal charities all over the civilized world which testify to the universal "brotherhood of man."

That "all men are created equal" can not be accepted as true, at least in so far as relates to their physical and mental capacities. But all men, women and children are or should be "endowed with certain inalienable rights," among which is freedom from the curse of alcoholic

*Read before the Indiana State Medical Association at French Lick, June 19, 1908.

excesses, either in their own lives or that of members of their immediate families.

It is a blight upon our boasted civilization that such conditions should exist as shown in a recent publication meant to be *funny*, where a missionary in making her rounds soliciting contributions was met at the door by an overworked, forlorn-looking woman just from her washtub, who, in answer to the question "Have you anything for the Drunkard's Home?" answered "Yes, come around next Saturday night and get my husband." How many hundreds of wives there are in Indiana who have sufficient cause to feel as this woman did. And, unfortunately, there are a good many husbands as well as fathers and mothers, besides helpless children, who feel the same way. I have no desire in this paper to outline any particular medical treatment for alcoholism or drug addiction; in fact, I feel my utter inability to do so, however much I might wish to suggest a treatment that would hold out a ray of hope to these poor unfortunates.

I presume we all are ready to admit that much of the drunkenness and drug addiction is due to heredity and environment. This is no doubt true; but we should be careful lest our sympathy cause such persons to become imbued with the idea that they, by reason of heredity and environment, are a class to themselves and not responsible for their lack of self-control. Of course, we are not responsible for our hereditary characteristics; but certainly we can, to some extent at least, control our appetites and passions and no man has a right to say because his father was a drunkard it is necessary that he should follow in his footsteps.

As "the child is father to the man" so it seems to the writer that if we wish to influence heredity it can best be done upon the generations yet unborn by proper education and control of those now living. As to environment, that can be changed; and while it may be a difficult thing to do, I believe no man should hide behind his environment and give that as an excuse for his dissipated habits. The causes of drunkenness and drug dissipation may be many and varied. Among them, as has been stated, heredity and environment are probably of first importance; physical and mental suffering also play a part in these cases. Business failures, domestic unhappiness, and, unfortunately, in some cases we must admit the cause is due to careless prescribing by the physician.

It is not necessary to believe because drunkenness is influenced by heredity that a child is born with an appetite for strong drink any more than to believe the child born of tubercular parents

harbors tubercle bacilli in his system as a legacy from the father or mother. But that there is a transmitted tendency toward tuberculosis and other so-called hereditary diseases there can be no doubt. So also it would seem that the children born of parents who have become excessive users of alcohol or narcotic drugs would be more likely to be deficient in mental poise and nervous equilibrium and more readily become the slaves of appetite and passion than the children of better balanced parents. For these reasons the children of these unfortunates should be taught from their earliest infancy the danger besetting them and every effort made to guard them from this foe. Some of these victims seem to be in this condition purely from choice, as they continually place themselves in the way of temptation and make no effort to abstain.

Then some appear to be criminally inclined, committing theft and deeds of violence when intoxicated which they would not do when sober. And, judging from the circumstances surrounding some of these criminal cases, the delinquent purposely nerves himself to commit such crimes by over indulgence in alcoholics or possibly narcotics.

Another class of these unfortunates seems to be on the border line of insanity. Indeed it is difficult to comprehend how human beings, made of God's own image, can so far forget their duty to themselves and their families and fellowmen as to degrade themselves even beneath the level of the lowest animal. But whatever the cause may be the fact remains that we have them with us, and the question is what to do with them. Believing as I do that it is incumbent upon the state to make some provision for the control and treatment of dipsomaniacs, inebriates and those addicted to the excessive use of narcotic drugs is the only excuse I have for bringing before you a paper which can in no wise be considered scientific; but rather humanitarian. I am aware that this subject has received a great deal of attention in the past and that there are many perplexing problems to be worked out before anything like satisfactory results can be hoped for in the management of this most difficult class of cases. But as guardians of the health and happiness of the people I know of no profession or class of men more competent to deal with this question or upon whom, by reason of their calling and intimate relationship with moral as well as physical delinquents, the burden of agitating a movement of this kind justly belongs, than to us.

Every physician who has had any experience in treating these cases knows that in most instances his best efforts are rendered useless be-

cause he can not control his patient. A few of them will recover under proper medical and hygienic treatment while retaining their freedom; and a few others will get away from the habit after a period of forced confinement in a penal institution, without any special medication. It would appear then that with absolute control, which can be secured only by legislative enactment, together with good hygienic surroundings, a pleasant environment, being well-fed, clothed and housed, supplemented with proper medical treatment for a sufficient length of time, ought to result in a permanent cure of some of these patients and a larger percentage of others would remain free from the habit for longer or shorter intervals. Of course, some of them would not be greatly benefited, if at all; and some would probably prove to be criminals from choice, and some might become insane.

In the opinion of the writer, state guardianship of these people is much more feasible than municipal or county. An institution such as contemplated in this paper should be founded upon broad general principles; and to reach all who should come under its influence it should have the moral and financial support of the state. It should be a hospital primarily for the treatment of such cases as should properly come under its beneficent care. The management should be free from political and mercenary motives. The superintendent should be a competent medical man with full control, not only of the inmates, but he should have the right to select his assistants, including physicians and nurses. And he in turn should be responsible to the board of trustees. Its doors should be open to all who need such treatment and have been residents of the state long enough to be entitled thereto. Admittance should be both voluntary and by legal commitment. But persons placing themselves voluntarily under such treatment should be subject to the same rules and regulations as those committed by legal process. Every effort should be made, for a sufficient length of time, by kind treatment, pleasant surroundings, work for those able to labor as a means of recreation and to keep the mind employed; good nourishing diet and proper medical treatment to restore these victims to their normal condition. However, it should not be made a permanent home for any one; but rather a sifting out place, where, in the discretion of the superintendent, after sufficient time has elapsed, they may be discharged on parole subject to return for violation of the same; or if the superintendent is convinced that a cure is impossible such patients should be placed in a separate institution sufficiently removed from the

former that no contaminating influence may be had upon those for whom there is still hope of a cure. This annex or auxiliary institution should exercise custodial care rather than hospital treatment; and should be made a permanent home for incurable cases, as the state can exercise better control over them than can be had otherwise and society thus saved from the baneful influence of such persons in the community at large.

It seems to me that the presence of persons who constantly permit themselves to be under the influence of alcoholic drinks or narcotic drugs to such an extent as to render them unfit to attend to business and to become a nuisance to their families and the community in which they live, can not be otherwise than harmful to those about them, especially the young. The presence of such a person in the home tends to destroy the domestic and social happiness of the family, and the financial strain upon those compelled to contribute toward their support is almost unbearable.

How many innocent young lives have been blighted and ruined by the curse of strong drink? Many a young man has had his college course cut short and many a young woman her social standing in the community ruined by the father's delinquency. But you may ask, what has all this to do with inebriate asylums? The answer is, give the father a chance to recover from his excesses and to again assume the responsibilities of life. But if he proves to be incorrigible and will not do the right, then free the family from his presence and the responsibility of his support. There is a law now in this state constituting child desertion a felony. This is right; but if child desertion, in the sense of a parent separating himself from his child and leaving it without support, is a felony with a penalty attached, what shall be said of the man who not only fails to provide for his wife and children but adds the burden of his own support, besides other abuses he too often heaps upon them?

I have tried to point out some of the moral and humanitarian reasons why the state should assume control and care of these people; now let us for a moment consider it from an economic standpoint. First, statistics show that the saloon license fees (county, city and town) in Indiana almost equal the entire maintenance cost of all the state charitable and correctional institutions. Second, the strength of a state or nation depends upon the mental and physical vigor of its individual citizens. Third, I believe statistics will bear out the assertion that a large percentage of the inmates of each of the thirteen charitable and correctional institutions of the state of

Indiana are where they are as the result, either directly or indirectly, of the intemperate use of alcohol and narcotic drugs. Fourth, if these statements are true it would seem that the state, for financial reasons alone, ought to take steps looking toward the restoration of as many of these unfortunates as possible; and those who will not cease their evil habits should have state supervision as to marriage in order that the propagation of such undesirable offspring may be reduced to the minimum. This may appear too drastic upon first thought; but it would only be in keeping with the restrictions now in force regarding the marriage of consumptives, epileptics, etc.

Referring again to county care of these cases, I wish to quote from the report of the Indiana Board of State Charities for the year 1907: "Our jail system is a standing disgrace, though it is some comfort to know that Indiana is no worse in this respect than any other state." Then they quote from the report of the committee appointed by the National Prison Association at Albany, N. Y., last year to make an investigation of the jail system of the United States as follows: "The county system of prisons, judged by over a century of experiment, is bankrupt. All who have studied the subject in full light of experience advocate removing all convicted persons to district workhouses and colonies under the control of state officials." Home and private sanitarium treatment results in the cure of some cases; but they fail in most instances because of a lack of control of the patient.

Whatever success the so-called Keeley and other like "cures" have enjoyed has been due perhaps more to the long time these patients are required to remain at the institution than to any specific virtue in the remedies used. Private sanitarium treatment is expensive also, and many who would can not afford to go to these places. And, on the other hand, some who could do so will not avail themselves of such assistance.

I find upon investigation that Massachusetts and Iowa are the only states maintaining separate hospitals at public expense for the treatment of inebriety, dipsomania and drug addiction.

Quoting from the statistics compiled by R. M. Mathews, July, 1907, we find that Maine provides for treatment of sufferers from habitual use of narcotics; and Connecticut, Delaware, Michigan, Mississippi and New Jersey provide for appointment of a guardian over and commitment—without patient's consent—to some institution for the cure of habitual drunkenness,

but makes no provision for public defrayment of his expenses if he be indigent.

In Pennsylvania a guardian must give security for payment of expenses, and in Rhode Island security by some one must be given for expenses. In Virginia two friends of the family must give security for expenses. In New Mexico and Texas provision is made for appointment of a guardian over an habitual drunkard, and his support at the county's expense if indigent, but no permission is given to have him treated for inebriety at public cost. An habitual drunkard, if indigent, is to be committed to the state insane hospital at county cost in Michigan, Nebraska and Wyoming. In these states the courts are to proceed in the same manner as if the person were insane.

In the following states an habitual drunkard, if indigent, may, with his consent, be committed to some curative institution for treatment at public expense as indicated:

Colorado.—County expense, not more than \$25 per week for treatment and \$7 per week for board. Institutions must show at least 75 per cent. of cures for past year.

Louisiana.—Parish expense, institution must agree to \$100 for one year.

Maryland.—At cost of county or city of Baltimore. Not imperative to treat an inebriate a second time at public cost.

North Dakota and Oklahoma.—At county expense if not over \$100 per year.

Vermont.—Consent of drunkard not necessary. At expense of the state.

Wisconsin.—Consent of drunkard not necessary. At county expense if treatment be taken in a state institution.

In all the above states if an inebriate be financially able, or his friends willing to bear the cost, he can be committed without his consent to any institution for his care through guardianship. Commitment means power to enforce confinement in institution for the period allowed. In Minnesota laws providing for treatment of indigent inebriates at public expense were twice enacted, but were both declared unconstitutional on account of details. And the supreme court in rendering an opinion in this case makes the following statement in part: "Nor are we to be understood as holding that a general act uniform in its holding throughout the state, providing for the treatment of inebriates at the public expense, would not be a valid law for reclaiming the inebriate, who is incapable of self-respect or self-support, and restoring him to society prepared

again to discharge the duties of citizenship, directly promotes the public welfare."

The argument may be advanced by some one that if the present wave of "anti-saloon" sentiment continues to advance there will soon be no use for an inebriate asylum. But as there has been drunkenness since the days of Noah it is hardly to be hoped that all men will become total abstainers so long as human nature remains as it is now.

And even if the time should come that for any reason such an institution was no longer needed for its original purpose, it could be turned into a hospital for insane, as we understand that all the state hospitals for the insane are overcrowded and that even the completion of the one at Madison will hardly provide for all the insane wards of the state.

A bill has been prepared by Senator A. J. Bowser, of Chesterton, to be introduced into the next session of the Indiana State Legislature, providing for the establishment of a state inebriate hospital. I presume most of you have read this bill, as it has appeared in the public press. This is a move in the right direction and one I believe which most medical men will endorse. There are many good provisions in this bill, but I wish to quote especially from Section 17, which reads as follows:

In any case wherein a person is convicted of a misdemeanor in a court of original jurisdiction in this state, if the evidence presented proves to the satisfaction of the judge that the person so convicted is a fit subject for the treatment of the State Hospital for Inebriates, and if the judge believes that the ends of justice and the best interests of the person convicted and of the state would be better served by a commitment to said hospital than by the imposition of the penalty as required by law for the misdemeanor of which the said person has been convicted, the said judge may make affidavit setting out such facts and belief and in the name of the state make application for the commitment of such person to said state hospital and shall suspend sentence pending the hearing thereon, which hearing shall be before another judge than the one making such application, and in no such case shall such hearing be dispensed with or waived. If thereupon a commitment of such person to the said hospital be ordered the penal sentence aforesaid shall be suspended subject to the discretion of the court before which such conviction was had.

In a letter from Dr. Charles E. Woodbury, superintendent of the Massachusetts Inebriate Hospital, he says: "No other one thing aided so much in the establishment of the institution at Foxborough as the fact that inebriates had to be treated in hospitals for the insane." Dr. W. S.

Osborn, superintendent of the Iowa State Hospital for Inebriates, in a letter says: "While we have been in operation less than two years, we have met with a fair degree of success. The matter of state care and treatment of this class of patients is largely in an experimental stage. There are a great many things that will have to be brought about in the course of time when we have found just what are the needs and requirements of such an institution. Patients are committed to this hospital in a similar manner as to insane hospitals. The usual duration of treatment is in the neighborhood of four months, depending upon the individual case. Some patients we have had with us since the institution opened, and others have been paroled after a residence of two months. The inmates are under restraint for an indefinite period after admission. We have both the voluntary and involuntary committed cases. Patients are paroled under pledge to make written report at the beginning of each month. If they fail to report they are taken and returned to the hospital, or if the patient relapses into his former intemperate habits he may be returned for further treatment and given parole when sufficiently recovered that he may get along.

"Since the institution opened there have been 800 patients. The daily average, about 150. The majority of patients are alcoholics, perhaps 85 to 90 per cent. The remaining 10 or 15 per cent. are composed largely of morphin habitués; however, we have a great many cocaine users under treatment, and I regret to say that the number of this latter class is increasing, and we find them to be difficult individuals to manage and treat." Then he adds, a statement which I especially wish to endorse: "I think that the time is coming when most of the Commonwealths will provide similar institutions for the care of this unfortunate class."

809-10-11 Odd Fellows Building.

DISCUSSION.

Dr. A. E. Sterne, Indianapolis.—I have so frequently voiced my feeling and sentiments upon this question in the State Medical Association that it is difficult for me to keep from repeating something of that which I have said on various occasions. I took the opportunity yesterday of registering myself in the line of the paper, more ably expressed by Dr. Wilson, of terminating this curse and of inculcating the teachings so needful and advocating the consideration of heredity, which is the cause of insanity, drug addictions and alcoholism itself. We must clearly apprehend as physicians what a significance heredity

has. We should and must know this, but we must refrain from teaching that a man the son of a drunkard must be or has a right to be a drunkard and that the son of a man insane must necessarily become insane. Many a man has become insane through fear, and we must keep that clearly in mind. Now we have tried on various occasions—that is, your Committee on Inebriety has tried—to get the attention of the legislature, but we have invariably met with opposition, and in one case with opposition from the drug trade. One objection was that it was putting too much burden on the druggist—not the right kind of a druggist. The bill failed to pass because of the opposition. We have learned something since then and will probably not make the error we did before. But I have grown somewhat sceptical. I used to be very optimistic about our power to stamp out this evil. As I grow older and see more I feel more shaky and dubious about it. The trouble is this, we look upon these individuals as sick people and imagine that is true. But it is a great and unfortunate outcome that society as a whole stamps to a certain extent its disapproval upon this kind of fight. That is a lamentable fact. But alcoholism is a social evil primarily. Most men take to drink in the beginning on account of the social atmosphere. It is a general thing. I believe years and years ago, possibly early in the last century, heavy drinking was commoner than now and general drinking less; now the general drinking is common and the heavy drinking growing less. When I was a young man—say twenty years ago, possibly a little longer—it was an uncommon thing to see a young lady or young matron in public using alcohol in any form, but I am sorry to say it is very common now, and it is looked upon with a certain degree of approval. Cocain and morphin are hidden. But it is unfortunate that the alcohol question is one which has this social prominence. I don't know how we are going to stamp that evil out. In our state meetings, general meetings, among our own profession, we sit down and do exactly what we condemn in others.

In regard to the drug addictions, I do not believe that a physician ever has a right or ever has occasion as a physician to give a prescription calling for morphin, cocain or anything of that kind—there is never a single condition in which he should give that drug out of his hand. The patient need not know what it is, this that or the other, so as to easily get it replaced. This is unlike the alcohol question, where the social element is a prominent one. In these drug addictions the first start came from some member of the profession. The cocain addiction is extremely

easy from the common use of cocain sprays in the nose and throat. Sprays are so easy to get and afford so much relief. I want to say that I most heartily endorse the movement for a state institution for this class of cases, which will increase, and in a generation or two double our present number of state institutions, because there is no doubt but that alcoholism increases the number of inmates in our prisons, insane asylums and other state and charitable institutions. We will lessen the number there by striking at the root of the evil at any rate.

Dr. J. M. Anders, Philadelphia.—I might say that this is an important subject and that we in Philadelphia have a bill to be presented at the next legislature with a view to establishing an institution for this class of cases. There is an earnest determination to do so, at least. I have promised to do what I can to help to secure its passage. Unfortunately in our state those addicted to drugs have no place to go except to the asylum for the insane and the poor house.

Dr. J. N. Hurty, Indianapolis.—In discussing heredity there is one point I think should be brought out, and yet I have not heard it brought out. It was not brought out yesterday, and that is the point that has been called attention to by August Weisman; that acquired characteristics are not transmitted. I am aware that this is disputed, but it must be pretty generally true. The addiction of alcoholism which comes through social conditions is dwelt upon, and it is claimed will not in any way affect the germ plasm. It is a habit pure and simple that has been acquired by evil surroundings and I consider these conditions which would produce that habit as always evil whether in the parlor of the rich and great or in the clubs of the land. I entered a certain club house not long ago and passing through the dining room there sat the cocktails already prepared for each diner. There were three different glasses prepared for three different wines and it was a surprise to find that the giver of that dinner was a practical business man, a man managing great interests. Now, could he do anything more impractical than that? And subsequently I saw his own daughter, less than 20 years old, partaking of those alcoholics. How may we reach that class? It is a big problem. The person who takes alcohol is more susceptible to disease, mental degeneration, everything that is bad for man.

Dr. G. W. McCaskey, Fort Wayne.—The chair would like to be permitted a word to express the disapproval of the theory of the non-transmission of acquired characteristics. He believes it is

unscientific and dangerous, as individuals who have acquired these diseases are disabled and can not discharge their full duty, therefore the posterity must be affected.

ATYPICAL PNEUMONIA.*

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INDIANAPOLIS.

Recent investigations of pulmonic inflammations by Aufrecht, Kuhn, Freidreich, Leichtenstern and others emphasize the necessity for a more definite classification of these acute inflammations.

The older writers recognized as such acute croupous pneumonia and grouped all other pneumonic inflammations differing from it in mode of onset, sputum and clinical course under the indefinite term of "typhoid pneumonia." Such atypical pneumonias may be produced by various bacteria, and the present tendency is to classify these various clinical forms according to their etiological factor. Differing from the ordinary croupous pneumonia is a type occurring during the prevalence of sharp, cold north and northwest winds in which the inflammation begins in a circumscribed area and gradually advances from day to day. The fever lasts ten to fourteen days, with undiminished severity. The fever more frequently terminates by lysis. Delirium and coma are more apt to develop. The spleen is enlarged often two or three finger breadths below the costal margin. Jaundice is very apt to occur and diarrhea is common. The case may assume a malignant, pernicious character resembling a typhoid infection. Leichtenstern, under the name of asthenic pneumonia, calls attention to a class characterized pathologically by the fact that infiltration takes place slowly, the hepatization being flaccid, more aptly termed splenization by rapid change to gray and marked tendency to purulent infiltration, abscess and gangrene.

Clinically the disease differs from the so-called croupous pneumonia in that it develops insidiously, temperature curve is atypical, there is great prostration with severe cerebral disturbances. The sputum if present is not characteristic, and the initial chill and pain are absent. This type is prone to occur in individuals suffering from some chronic disease as diabetes mellitus, chronic interstitial nephritis, cirrhosis of

the liver, chronic alcoholism, extreme age, etc. Because they occur in the course of these affections and depend upon their presence as the predisposing factor they have been termed secondary asthenic pneumonia.

Primary asthenic pneumonia differing from the above form may occur in the young as well as old and in strong individuals. It is due to infection with a specific poison and frequently occurs in a lobular form. Constant enlargement of the spleen, frequent enlargement of the liver with jaundice and the presence of albumin are sufficient to characterize the disease. This type more frequently occurs in prisons or similar institutions, although Mueller and Batry describe similar epidemics in villages.

Numerous other observers have reported cases that tend to show it as quite distinct clinically and etiologically from the acute croupous type. A comparison of the pathology of acute croupous pneumonia with the atypical forms may be of value.

Most writers recognize four stages in acute lobar pneumonia: first, stage of engorgement; second, stage of red hepatization; third, stage of gray hepatization; fourth, stage of purulent infiltration or resolution. If consolidation occurs the vesicles and finer bronchi are filled with exudate consisting of fibrin, cellular elements and blood.

Atypical pneumonias in contrast are also lobar, the lung is heavy, airless and on section of a dark red appearance. The structure is soft, similar to the diseased lung of croupous pneumonia in the stage of engorgement. The vesicles are filled with blood, the lining of the bronchi are open and fibrin is absent during the entire course of the disease. The appearance noted above has led to the term splenization being used to describe it rather than hepatization applied to the liver-like consistence in acute lobar pneumonia. These characteristic differences permit of a different group of lobar infection in which the individual cases will in the future be differentiated by the bacteriologic cause.

It is now recognized that so-called acute croupous or lobar pneumonia is always due to the presence of the diplococcus of Fraenkel, diplococcus pneumoniae.

In atypical pneumonia the bacteriological study has not been sufficient for them to be classified according to their etiological factor, yet it is expected that a definite bacteriological cause will be found for each type. The diplococcus, bacillus pneumoniae, staphylococcus, streptococcus, bacterium coli and in the type transmitted from parrots to man a bacterium not identified have been

*Read before the Indiana State Medical Association at French Lick, June 19, 1908.

found in these conditions. Further investigation may enable us to state with a reasonable certainty the etiological factor and to properly classify the disease.

Aufrecht gives the following classification without regard to the etiological factor: 1. Asthenic and bilious pneumonia. 2. Prison pneumonia. 3. Pneumonia occurring in epidemic form in special localities and directly transmissible. 4. Pneumonia communicable from birds to man. 5. Pneumonia communicable from other animals to man. 6. Pneumonia occurring in pyemia.

Other authors may make different classification, thus adding to the general confusion from lack of a definite nosology. For example, Babcock mentions under this classification migratory, relapsing, abortive, central, massive, latent typhoid, bilious, asthenic, terminal and hypostatic and senile pneumonia, taking as his basis the clinical course. French, Osler, Anders and Strumpell merely mention the various forms, Anders giving perhaps the most complete description of the clinical varieties. Further bacteriologic study will ultimately bring out of confusion and place the nomenclature on a definite scientific basis and will make the clinical study much easier and more fruitful of results.

Every variety of atypical pneumonia presents peculiarities in the duration and severity of the disease. These will depend largely on age and susceptibility of the patient. The etiological factor will have marked influence on the course of the disease. As a result of the above-named influences marked differences in the symptomatology will occur and no classical description can be made.

The disease in most instances begins with a feeling of general malaise and gradual rise in temperature so that it will not be well marked before the fourth day. In such cases the physical signs of pneumonia may not be demonstrable before the second to fourth day. The disease, however, may begin with a chill and sudden rise in temperature to 103 or 105 and may terminate by either lysis or crises, more often the former.

Physical examination will reveal on the second to fourth day over the area of the affected lung a diminished resonance, rarely well-marked dullness, an empty note with or without tympanitic admixture is frequent, later marked dullness may occur, the affected area becoming more extensive. The loud bronchial breathing of acute lobar pneumonia is replaced by a note of soft bronchial respiration and crepitation. Vocal fremitus is less marked.

The sputa are rarely characteristic. Rusty sputum rarely occurs, although the prune juice sputa may occur rather early, the sticky fibrinous character of acute croupous pneumonia is absent. Sputa may be purulent from the beginning.

The spleen is nearly always enlarged. Diarrhea with foul-smelling stools is frequent. The urine is albuminous and parenchymatous nephritis frequent. Roseola and petechiæ occasionally occur. The nervous system is frequently involved, clouded sensorium, stupor and delirium occurring. Pleurisy is frequent; pericarditis rare. Nearly all writers regard the disease as severe and the mortality great. Marked albuminuria with early and severe involvement of the nervous system renders the prognosis exceedingly unfavorable. Early microscopic examination of the sputum is essential, the absence of the diplococcus pneumonia and prevalence of other bacteria aiding in the diagnosis.

In institutions where the disease occurs the cases should be isolated. The medical treatment of the disease does not differ materially from that of acute lobar pneumonia.

The insidious onset, the atypical temperature, the absence of characteristic sputa, the lateness of physical signs, the bacteriological content, are aids in differential diagnosis. The variations in clinical course, the graver prognosis, make the condition worthy of further study. At the present the streptococci have been the most frequent demonstrable etiological factor, Finkler finding it in twenty-seven out of forty-two cases, the staphylococci coming next in twelve cases. Recently I have had occasion to observe two cases coming under the atypical class:

CASE 1.—Mrs. B., age 26, wife, family and personal history negative. In the fourth week following labor complained of general malaise, headache, loss of appetite and slight cough, with temperature of 99.5, pulse of 116. Physical signs on examining chest negative. On fourth day temperature had gradually increased to 102.4, pulse 120. Cough rather severe, no pain. Examination revealed diminished resonance over base of right lung, involving about one-third of lower lobe, soft bronchial breathing and sputum purulent and filled with streptococci, no other bacteria present. Disease terminated by lysis, temperature becoming normal on tenth day. Repeated examination revealed streptococci.

CASE 2.—Charles Mc., age 43, butcher, admitted to State College Hospital Feb. 25, 1908. Family history negative, personal history diseases of childhood, including scarlet fever. Had drunk beer since age of 2 till ten years ago, since which time whiskey had been used to extent of twelve to fifteen drinks daily.

Present illness, symptoms of la grippe for three weeks, general aching and malaise, more or less fever, cough, with considerable yellow expectoration, sometimes tinged with blood. Became worse two days before entering the hospital, had a light chill, cough and expectoration increased. Severe diarrhea, foul-smelling stools. Patient walked to hospital and admitted at 8 p. m., February 25, with pulse 92, temperature 98.4, respiration 20. February 26, pulse 82, temperature 100, respiration 20, and at 8 p. m. pulse 80, temperature 101, respiration, 24. Physical examination, inspection, patient well nourished, weight 175, dusky appearance of face, conjunctival jaundice, tongue dry, tremulous, brown coat, lips dry. Chest, veins prominent, small telangiectasis over surface, capillary reflex sluggish, respiration regular, retarded on left side.

Percussion, impaired resonance on left side beginning at clavicle and extending to fifth interspace in mammary line. Vocal fremitus increased over area of suggested dulness.

Auscultation, soft bronchial breathing over left side to fifth interspace, moist râles, increased vesicular breathing over right side.

Heart, negative except slight increase in second pulmonic sound. Abdomen, distended and tender to touch. Spleen enlarged. The fever gradually increased until temperature reached 102.6. Pulse 100. Area of diseased lung became markedly dull by third day. Expectoration purulent and full of streptococci, occasionally streaked with blood. Diarrhea profuse, sensorium clouded. Patient in stupor during most of illness, albumin constantly present, marked leucocytosis.

Illness terminated by lysis, temperature reaching normal on twelfth day. Patient left hospital on March 30, having been in five weeks.

The things noted in these two cases were: First, the insidious onset; second, physical signs not prominent before fourth day; third, temperature irregular and terminating by lysis; fourth, presence of streptococci as only demonstrable etiological factor.

The further study of these cases, differing as they do from the acute croupous pneumonia so-called in so many ways, may lead us to a rational basis for their classification. I believe they should be classified according to their etiological factor. A careful study of atypical forms will enable us to have a better basis for prognosis as well as a more scientific basis for treatment.

DISCUSSION.

Dr. J. M. Anders, Philadelphia.—This is a question of great interest to the general practitioner from the fact that the cases are more numerous than has been supposed. I agree with the essayist that the classification of these cases

is entirely unsatisfactory at the present time. The symptomatology was fully presented by the doctor. With reference to the physical signs, they are precisely as Dr. Sowder has given them. The diagnosis is, of course, very important, and in all cases I would earnestly urge that the sputum be examined microscopically and the organisms be identified. It is only in this way that we will be able to know the pathology.

Question.—Do you think the opsonic index would be of value?

Dr. Anders.—No sir.

Dr. Chas. R. Sowder, Indianapolis.—I simply presented this paper to call attention to the distinction that we ought to begin to make in these cases, and that we should particularly be careful in using the term "pneumonia." Recently a physician said that he had sixty-five cases of pneumonia in one winter, which would be most unusual. I think there would be a question as to the diagnosis of the condition rather than such a wide prevalence of the disease. We may be able to solve some of these problems later by the use of the serums, and we should as internists keep abreast of the fellows in the laboratory and aid them in getting a serum that will throw off these conditions, as well as aiding us in their classification.

DERMOIDS.*

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A discouraging feature in the study of these growths in the body of man is the want of definite knowledge on the subject. This is particularly noticeable in the etiology. The idea in medicine, wherein the question of tumors is most pressing, is to discover a preventative or institute a reliable cure. It is not unlikely that control could be advanced over the present method of treatment if the nature of false growths were more fully understood.

A research in the properties of a protoplasmic cell shows a decided preference in its actions to conform to a set environment. That impulse best fitted in design to the welfare of its being is most readily accepted, while opposite situations are equally well rejected. It is analogous to the changes in other elements in Nature which obey an inexorable law, i. e., the sea tides of the ocean and chemical reactions in minerals conform to gravity and attraction.

When mistakes of Nature are unfolded they reveal a rational order infringed; a guiding influ-

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ence or force, which in the inanimate atom or molecule is termed affinity. An appropriate title for such an organic inception is not at hand. The "susceptibility" which impels the branch towards the light and the root towards the ground in plants and guides the spermatozoon toward the ovum in animals, governs the entire arrangement of the cells throughout the body of man. Physical change in the life of a unicellular body is practically identical to anatomical changes in the human system; "irritability" in the cell corresponds to "sensibility" in the cultured human being, and follows the same fundamental principle inherent in all living matter, taken as a whole.

This theory of Webber-Fechner brings the entire psychophysical relation of the body of man in consonance to the law. Where the adjustment is harmonious the body is considered to be in health; a deviation from this balance manifests itself in symptoms the meaning of which we diagnose as disease. The words normal and death are descriptive terms for the extremes in perfection and disorder respectively.

The origin of dermoids traces back to fragments or cells of skin which became displaced in the embryo into tissues where they do not normally belong, and to defects in the fetus that encumber its proper evolvment. In spite of the failure of various attempts to demonstrate the parasite of malignant tumors, it may be hoped that, with improvement in scientific methods, such a parasite may be unequivocally demonstrated. As striking examples: the miliary formation in tuberculosis, granuloma in leprosy, gummata in syphilis and the toxic elements found in carbuncular diseases, force a recognition of the marked influence of bacteria and their poisons on the tissues of the human body.

The name dermoid limits the contents of these tumors to the elements which properly belong to the skin and the mucous membrane. Their walls possess the characteristic structures of these tissues, and contain sebaceous material, hair, fatty detritus, cholesterolin, teeth, etc. As sequestered growths they occur near the tissues where union of skin surfaces took place in the embryo and in obsolete organs which fail to disappear before birth.

Landmarks to locate the positions referred to follow in the lines of coalescence of the primitive processes that form the face and neck. The contour of these parts give an imaginary drawing of surface delineation along the eyes, mouth and fronto-nasal divisions, a guide indicating the places where these tumors are most apt to arise. A line drawn from the occipital protuberance to the coccyx through the perineum (serotum

and penis) onward through the midline to the neck, corresponds to the tumor line in the body proper. It was here that the skin surfaces met when the germinal layers tubed the trunk and enrobed the spine. Implantation is a means of migrating these tumors to the limbs, and for this reason they might be found on any other part of the body. Another type of these dermoids are those that grow in the scalp and at the base of the nose. During early embryonic life the hyaline cartilage of these parts is covered with skin; as bone develops between the two a fragment of skin remains under this bone and gives rise to a tumor.

The prognosis depends on the location and extent of the growths. When occurring near the surface of the skin they can be removed without any danger of harm to the body. A growth of hair in the mediastinum, however, will invade the lungs, et cetera, and cause a suppuration in the bronchi. It demands an early diagnosis with enucleation to prevent fatal consequences. Dermoids of the scalp interfere with the brain by their downward growth and result in death to the patient when not removed.

Persisting branchial clefts, a remaining thyroglossal duct, or a retained post-anal gut, are sources from which tumors manifest themselves as tubulo-dermoids. The first of these mentioned (branchial) occurs beneath the deep cervical fascia of the neck; the next (lingual) forms in the genio-lyo-glossi muscles of the tongue, and, lastly, the anal variety may pedunculate intra rectum, like polypi, or project out of or up into the hollow of the sacrum, between the bowel and the coccyx. Complex in structure they may contain teeth and grow to be large in size. (14 lbs.).

The so-called ovarian dermoids belong, in reality, to embryomata; pure dermoids are rarely found in the region of the ovary. They originate in the oöphoron, whether from ectopic blastomers or fertilized polar bodies, is not determined. They include all of the germinal layers as structure material; are smooth and spherical in shape and pearl gray to yellowish white in appearance. Rudimentary organs of smooth muscle, bone, central nervous system, glands of skin, intestine and other abdominal organs make up their contents. Adult cells are characteristic. These tumors may occur in intrauterine life or old age, varying in size from microscopic growths to fifty pound tumors.

Teratomata class as embryomata and are supposed to be characteristic of malignant tumors of the ovary in early life. Their contents correspond to the different layers of the germinal membranes but have no fairly regular form or

arrangement, existing as a complicated mass. The cells also are embryonic in type. Teratomata are known to occur in parts of the body outside of the abdominal cavity, and sometimes to be nodular in growth.

Moles become items of concern when large areas are involved, as half of the body and face, or where secondary changes threaten to give them a malignant character. Hydatidiform moles are embryonic neoplasms that deserve attention on account of their intense malignancy.

It is not uncommon to find yellow to brownish patches of pigmented skin, varying in size from dots to one-fourth inch in diameter, on the body anywhere. The places scanty of hair are most affected, but the scalp and conjunctiva are not exempt. Microscopically, they consist of flattened or papillary columns of chromatophoric cells arranged perpendicular to the surface of the skin.

Melanoma is the malignant tumor which develops from the cell changes that set up an alveolar sarcoma. When sharply defined from the stroma and its arrangement and form are like epithelial cells, it has the appearance of pigmented carcinoma; extravasated blood in the tumor gives it the resemblance of a hematoma. They class as pigmented spindle-celled sarcoma.

DISCUSSION.

Dr. Moses Thorner, Indianapolis: The origin of these peculiar growths has been made clear in great measure since embryology has been developed. There is, however, considerable chaos in their classification and riddle as to why they should so often be the seat of malignancy. Thus these growths are for the most part classified as dermoids, whether their structure conforms to the skin and its elements or a variety of tissue inclusions. . . . We can only look upon these formations as growths of sets of tissue, in which more or less skin, as well as more or less tissues from other embryonal layers take part, and have not been used in the general economy, i. e., superfluous tissues. It likewise is confusing to group as dermoids various cysts of the occlusion type, which are the result of simple failure of coalescence of different layers, as in the branchial clefts, or the remains of the Wolffian duct (the duct of Gärtner), etc.

It would seem that the real growths, due primarily to cell hyperplasia, and not the result of occlusion and distension, should be included under the one term "embryoma," and the name "teratoma" (miraculous tumor), abolished as in-

accurate. Under this latter term are included growths which vary in structure from a complex grouping of irregular cell masses to parasitic fetal growths and (Siamese) twins. Of these teratomata the former type are undoubtedly displacements of embryonal tissue, and are rightly classed with the so-called dermoids; while an explanation of the latter, well organized and correlated tissues, would scarcely harmonize them with the above named growths, particularly if we would seek a different, and, it appears to me, more plausible genetic explanation of their occurrence.

The close relationship that certain so-called dermoids and teratomata bear to malignancy has tempted me to discuss for the most part simply this phase of the subject, at the same time to offer a theory of my own with reference to the causation of malignancy, which is original if it is nothing else.

The Cohnheim theory of the causation of malignant growths, namely, as being due to displaced embryonal tissues, has been the one theory that until very recent times has answered in considerable measure the solution of this complex problem. And even now, with modification, it still holds the field as more nearly answering the varied conditions of malignant tumors. Still the fact of limitless power of multiplication, the lack of order and correlation ("altruism of tissues" as termed by Ewing) stand as a grave impediment to accepting this theory as explaining more than a soil for these growths, than as a cause of the same.

Embryomata (i. e., dermoids and certain teratomata) are undoubtedly displaced embryonal tissues; but malignant growths are more than this. The energy of malignant tumors knows no bound and they never mature. Contrasting with this, the tissues concerned in true embryomata mature, and show a waning energy, as does ordinary normal, matured tissue.

Again malignant growths are proliferations chiefly of special cells (round cells, spindle, squamous, and gland epithelial cells, respectively) and remain confined to them, while metastases reproduce but the original type—the stroma following along in haphazard fashion. Embryomata, on the other hand, are simply the development to greater or less degree of groups of tissue. Reasoning from analogy, malignant growths are very like the fecundated ovum. Thus in the latter there is evidence of mitosis most pronounced and energetic, beginning with conception, and lessening as life progresses. The same is

true in the former, though there seems to be no lessening of its energy to proliferate.

In the case of the fecundated ovum, the energy is applied to the source of all succeeding cells; so that the cells of embryonal remains, receive but a part of this impetus, and normally, completely differentiated cells but an infinitesimal part of the whole *vis a tergo*, the one exception being the sexual cell.

In malignancy the entire impetus to proliferate is concentrated in the single, differentiated cell, and explains its ability to far outgrow its environs, at the expense of the latter.

What can instill such an impetus into a differentiated cell? We know that in the ovum it must be the opposite sexual cell, the spermatozoon. The spermatozoon is attracted to the ovum (chemotaxis). We do not positively know that superfecundation does take place in the higher animals, and in these it has never been artificially produced, but it is known to occur in the lower type, and when it does monstrosities are the outcome.

Carry the development of tissue down to complete cell differentiation, and, although we have no record of the spermatozoon fecundating such a cell, at least I have it from two of the best authorities in this country in this work, that it has never been attempted experimentally, and is worthy of trial.

The necessity of fertilization of cells in order to produce the regenerative power, as is exhibited in malignant growths, has led to different theories of this accomplishment. Thus Klebs (1887-89) supposed that tumor cells are fertilized through conjugation with leucocytes; Waldeyer (1887), by some parthenogenesis; v. Recklinghausen (1896), by conjugation of endothelium and fibroblasts; Auerbach (1891) and Bashford (1904) by nuclear conjugation of equivalent cells; and recently Farmer, by the conjugation of nuclei.

The fault in these theories lies in the explanation of the resultant reproductiveness of such union of cells *being so greatly in excess of the inherent power before conjugation*. This difficulty can be met in assuming one cell at least a sexual cell, the spermatozoon.

The above briefest outline of my theory is then, that:

(a) Superfecundation by the spermatozoon may take place at any time in embryonic, fetal and postfetal existence.

(b) When superfecundation occurs in the undifferentiated germ plasm, certain teratomata (fetal parasites, etc.) result.

(c) When occurring after complete cellular differentiation, then malignancy (cancer and sarcoma) results.

(d) Only cells that can primarily proliferate can be fecundated; thus we never have malignant tumors consisting of the purely parenchymatous cells of organs, as the liver, brain, etc.

From a study of the available malignancy theories the fecundation theory seems the one that answers all the conditions for these growths.

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EDITORIALS

THE EFFECT OF SUNLIGHT ON THE TUBERCLE BACILLUS.

To the modern clinician, the stand taken by Major Woodruff¹ in regard to the danger of sunlight in tuberculosis is both irrational and illogical. The real question hinges upon the point of whether or not, other things being equal, sunlight is in itself inimical to the longevity of the tubercle bacillus, and such far fetched analogies as Woodruff would draw between his own and the commonly accepted doctrine, and that of Bodington and his confrères upon the occasion of the opening of the first fresh air sanitarium, are absurd. Plenty of experimental evidence is at hand and readily accessible for establishing beyond doubt or cavil the deleterious effect of sunlight upon the growth of the tubercle bacillus, even though Dr. Knopf had not been kind enough to furnish the Major with evidence from clinicians whose opportunities and powers of observation are beyond reproach. The point has been demonstrated time and again, and we would refer especially to the work done along this line by Koch, Ransome and Delephine, Gardiner, Migneco, Mitchell and Crouch, Strauss and Twitchell. The perfection of detail and the positiveness of the conclusions of Twitchell's recent work are sufficient excuse for reproducing an abstract herein:

One c.c. of virulent sputum from two patients with active tuberculosis was deposited in sterilized, corked and paraffined white glass bottles, three c.m. in diameter, with a depth of one c.m. One bottle was placed in a dark, moist box, and similar bottles in a dark closet, and in the diffused light of an ordinary room. In another series of experiments the bottles were exposed to light conditions but were stoppered with cotton. Still again the sputum was deposited in sand within the bottles, with the bottles corked and paraffined in some instances and unsealed in others. Sputum deposited in the white glass

sterilized bottles with and without sand, sealed and unsealed, were placed in the thermostat. Open white glass bottles were deposited in the open air during the winter months. Corked and paraffined bottles were buried in the ground. Other bottles corked and paraffined were packed in ice or frozen in blocks of ice. Sputum was deposited upon handkerchiefs, carpets, wood and woollen blankets, under ordinary room conditions. Subsequent inoculation experiments with the sputum placed in sand and in blocks of ice were not satisfactory. The sputa placed in a dark moist box or a dark closet, under the varying conditions described, produced tuberculous lesions in guinea pigs after 157 days, but in no instance after 188 days. Positive results attended the inoculation of guinea pigs with sputum contained in paraffined bottles after exposure to the diffused light of an ordinary room for 124 days but not after 175 days. The sputum in open bottles placed out of doors in the winter months produced tuberculous lesions after 110 days but not after 132 days; the sputum from ice after 102 days but not after 153 days; from a handkerchief or woollen blanket after 70 days but not after 110. The same was true of the sputum deposited upon wood. Tuberculous lesions were produced by the inoculation of sputum deposited upon the carpet after 39 days, but not after 70; upon the sand in a light, dry place, after 30 days, but not after 70. The sputum exposed to the direct rays of the sun was found productive of a tuberculous lesion after one hour, *not after seven hours*.

Compare the results of the sputum exposed to the direct sunlight with that in an ordinary room, and this question has its solution conclusively demonstrated.

THE EFFECT OF OVERCIVILIZATION ON MATERNITY.

Exceedingly apropos of the times appears an article under the above caption in the October issue of the *American Journal of the Medical Sciences*, by Dr. Franklin S. Newell.

It has become a well-established fact among obstetricians of wide experience that a certain type of woman exists who, by virtue of an over-civilized environment from childhood up, has come to depart very widely from the natural condition which permits of the processes of gestation and labor as perfectly physiologic ones, from which, with reasonable care, the patient should be expected to make an absolutely com-

1. New York Medical Journal, Sept. 12.

plete recovery. And, unfortunately as it may seem, the evil is on the increase, rather than otherwise.

A vivid contrast is drawn by the author, of the hard-working woman in the midst of poor environment, with her daily toils continuing up to the advent of labor, coming to term in good physical condition, and, in the absence of definite organic disease, able to go through, if need be, a prolonged or difficult labor with no untoward symptoms and often delivering herself safely even without aid of anesthetics; and of the other type, the overcivilized woman, who in spite of constant medical supervision throughout her pregnancy, develops marked nervous symptoms or manifestations of faulty elimination and autointoxication. The latter type, often unwilling or unable to obtain the proper amount of fresh air and exercise, comes to labor in a condition of poor resistance, the process is often pathologically prolonged or, in spite of anesthetics, painful, or a short and easy labor terminated perhaps by an easy operation is followed by an alarming collapse with slow recovery. Even after convalescence is completed the patient is left with a dread of future pregnancies, the nurse may be entirely inadequate or at best last only two or three months.

The author is unwilling to believe that this disparity can be explained alone on the theory of evolution, the principle of survival of the fittest among the working class eliminating the weaker, and environment among the overcivilized permitting of the perpetuation of the less strong. But he believes the key to the situation will be found in a study of the conditions under which the city-bred girl of to-day is reared. Like a hot house plant she is trained from childhood up with the one idea that at a specified age certain definite accomplishments must be acquired, that she may be the finished product that is necessary for her social position. To the strain of her usual studies are added those of music and society, while the fresh air and outdoor exercise of athletics, if to the latter she be inclined, are obtained only at the expense of the time she should be using in recuperating from the effects of the previous night's ball. A large proportion of these girls suffer from a nervous breakdown before the age of 25, temporarily nervous invalids at the time when health is most needed. The duty of the obstetrician lies not only in concluding labor with a living mother and child, but also in bringing the young mother through the whole process in the best possible nervous and physical condition for the fulfillment of her further functions.

The question arises then, how best to meet these abnormal conditions as we find them. Many women there are, peculiarly sensitive to pain, and on whom the effects of a hard labor are severe and lasting, who react but slightly to a moderately severe operation undertaken before the occurrence of exhaustion. If a thorough study of the patient's condition throughout pregnancy reveals the fact that she has not improved in health, her condition in the later period being less satisfactory than in the earlier stage of her pregnancy, elimination poor, muscular system flabby, nervous equilibrium so unstable that marked reaction follows the slightest discomfort, it is fair to presume that such a patient will come to labor in an unfavorable condition to withstand the strain of a prolonged and difficult one. Borderline cases may be allowed to enter labor under such careful supervision that immediate delivery will be undertaken with the first appearance of unfavorable signs. But with a bad prognosis certain before the onset of labor, operative procedure at a set date is absolutely indicated.

Until recently, in the absence of faulty relation between the child and the mother's pelvis, operation was limited to delivery by forceps or version, despite the fact that many a woman has been temporarily or permanently sacrificed on account of injuries to the pelvic organs incident upon a normal or operative delivery. Hence the study of the patient must include an estimation of the probable damage that will result from delivery per *vias naturales*.

Given an elderly primipara with rigid soft parts and the danger of serious after-effects consequent upon a pelvic delivery, the wisdom of the conservative obstetrician will to-day demand abdominal delivery, which, under proper conditions and in the hands of a competent operator, is practically without danger and at the same time offers a distinctly better chance for proper recovery than the mutilating pelvic delivery, which so often requires subsequently a more or less serious operation to restore the patient to even a moderate degree of health.

EDITORIAL NOTES

IF YOUR county society meetings are not reported in THE JOURNAL ask the secretary of your society why he does not furnish us the report.

Do you attend the meetings of your county society? Do you realize that the society needs you and you need the society? No man knows so much that he can not learn from others, and knows so little that others can not learn something from him.

News items of interest to the medical men of Indiana are solicited from any member of the association, but in particular from county society secretaries who by virtue of their offices are correspondents for *THE JOURNAL*. Newspaper clippings, with name and date of paper from which taken, containing accounts of deaths, marriages, removals or other items of interest, are always gratefully received by the editors.

WE WISH to remind our readers that the state association dues for 1909 are payable on January 1, and it is therefore advisable for county societies holding meetings only once each month to collect dues at the December meeting. It is also well to remember that any member who does not pay his annual dues on or before February 1 will be dropped from the rolls, and his name taken from the mailing list of *THE JOURNAL*.

NEXT month the majority of the county societies will elect officers. Extreme care should be exercised in the selection of a secretary. If your secretary is a good one, full of energy and enthusiasm and constantly working to build up your society, then retain him. If he is apathetic, indifferent to the success of your society, and otherwise inefficient, then elect a new secretary. Remember that the best society is the society that has the best secretary.

It is eminently proper for a medical man to devote from one to two hours to a formal address, but it is a stretch of propriety for any man to consume two hours of the time of a medical society in the reading of a regular paper which, according to the rules of the society, should be confined to fifteen or twenty minutes. The difficulty of many men is that they have an exaggerated idea of their own importance or else they lack the faculty of "boiling down" their speeches and avoiding iteration and reiteration.

PUBLIC attention in England has been aroused by the frequency of deaths from anesthetics, three inquests in one day having recently been held in London on persons dead from this cause.

On this account the question has been taken up with the Home Secretary and a communication addressed to the general medical council, urging the adoption of a course of instruction in the administration of anesthetics in all medical colleges. This is in accord with the sentiment expressed in a former editorial¹ in which we advocated including this branch in the curriculum of every medical college in the country, this course to be supplemented in hospitals by practical experience under the supervision of a trained anesthetist.

GOVERNOR-ELECT THOMAS R. MARSHALL, son of a physician, a man of unquestioned integrity and superior intelligence, and for years the friend and supporter of the medical profession in all honest and progressive endeavor, can be counted upon to do the fair and sensible thing when he comes to consider the medical, public health and other legislation in which the medical profession is seriously interested. Mr. Marshall is a broad-minded, capable and conscientious man. He is above the narrow-minded, demagogic and selfish attitude displayed by some men who have served in the gubernatorial chair of Indiana. He believes in the old-fashioned honesty which applies in public as well as private life, and no influence, of whatever kind, will swerve him from what he considers the straight and narrow path of duty. His highest ambition as governor will be to serve in such a way that the greatest good to the greatest number will be secured. In his endeavors he will ever be found on the side of truth and justice as he conscientiously views it.

Do you as a member of the Indiana State Medical Association realize what you are receiving for the small sum you are paying each year as dues? Your membership alone and the honor and privilege accompanying it are worth the \$1 you pay as dues, but in addition you are receiving *THE JOURNAL*, which alone actually costs more than twice as much as you are paying as dues. And what are you doing to help the association, *THE JOURNAL* and yourself? Are you cheerfully and willingly giving the association and *THE JOURNAL* your encouragement and support in order to build them up and make them better, or are you indifferent to their success and only show activity in efforts to discourage and create trouble? The association and *THE JOURNAL* are not what they can be made and will be made, but for either to progress requires your

1. *Journal of the Indiana State Medical Association*, vol. 1, No. 5.

encouragement and support. Not everyone can be pleased, for tastes and opinions differ, but if in the main the association and *THE JOURNAL* are conducted along right lines then each member should make it his business to help the good work along. All effort should be constructive and not destructive, and always in the interest of the medical profession as a whole.

THE JOURNAL was established in the face of obstacles and difficulties which it was prophesied by some were insurmountable, but labor and persistent effort have brought about a result that certainly should be gratifying to the members of the association. *THE JOURNAL* has stood and will continue to stand for right principles, and for all that is best for right-thinking medical men. It will always work for the upbuilding of the state association, and in particular the county society, which is the foundation for all medical organization. The editors solicit and have a right to expect not only encouragement and support, but honest and friendly criticism in this work, in endeavors to make *THE JOURNAL* larger and better in every way. They have the capacity for work and the proper amount of enthusiasm, without either of which nothing could be accomplished, but they want the co-operation of every member of the association in order to accomplish the greatest good for the greatest number. Will you help in the good work?

THERE are now 152 medical schools in the United States, of which 123 are regular, 16 are homeopathic, 8 are eclectic, 2 are physiomedical, and 3 are nondescript schools which offer to teach all systems of medicine. Since last year there has been a net decrease of nine colleges, and indications point to a further decrease during the present year. On the whole, there has been a lengthening of college terms. Only two colleges this year report sessions shorter than twenty-seven weeks. Of those having sessions of twenty-seven or twenty-eight weeks, the number is 21 this year. There are now 26 colleges claiming courses of twenty-nine or thirty weeks, 51 claiming courses of thirty-one or thirty-two weeks, and 46 colleges require from thirty-three to thirty-six weeks. Among the latter is the Indiana University School of Medicine, which is also one of the 26 schools which either already require one year of work in a college of arts devoted to physics, chemistry and biology, in addition to a four-year high school education, or have announced their intention to do so on or before 1910. In the majority of the schools there has

been a decided tendency not only to advance the entrance requirements and lengthen the terms of actual work, but to improve upon the methods of teaching and greatly increase the requirements for graduation. With the rapid advance in medical knowledge has come this demand for a more thorough preliminary preparation and a thorough laboratory and hospital training before a student becomes a qualified practitioner. To meet the modern demands a medical college must be fully equipped with all the extensive apparatus so necessary for the teaching of modern anatomy, physiology, pharmacology, bacteriology and pathology; must have experts paid to devote their entire time to these laboratories; must have hospital and dispensary facilities for graded clinical instruction, and laboratory courses in clinical diagnosis in connection with the study of hospital and dispensary patients. Trained teachers who are also successful clinicians are required to secure and maintain a high standard, and the attending expense requires state aid. The medical men of Indiana should be proud of the fact that our own school, the Indiana University School of Medicine, meets all the requirements of a modern medical school and gives promise of keeping abreast of the most advanced institutions of learning. The highest aims will not be met, however, without the earnest encouragement and support of a united medical profession, and Indiana medical men should constantly work for such state aid as will make it possible to maintain standards of efficiency second to none of the medical schools of the country.

THE Liberal Life Insurance Company, with home office at Anderson, Ind., has the following to say concerning the fee paid for life insurance examination: "Two dollars and fifty cents is our fee to all examiners through the state; our examiners are the very best and we have never had the least bit of trouble with any of them regarding our fee; the amount is the same regardless of how much the policy may be. We use the same blank for a \$500 man that we would a \$5,000 man, and the questions all require the same attention."

We suggest that the fee, fixed as it is upon what some doctors will accept and not upon what good services are worth, should be reduced to \$1.25, or even \$1. If the "very best" examiners can be procured for \$2.50 without the least trouble then it certainly is possible to secure enough "very best" examiners at smaller fees, and the money thus saved can be devoted to an

increase in the salaries of officers who work so hard (to keep the doctors from obtaining just fees) in the interests of the company. Meanwhile the doctors will probably send in a vote of thanks for the privilege of making examinations at such a profitable rate.

For the benefit of the "very best" examiners of the Liberal Life Insurance Company, we desire to say that there are many insurance companies that appreciate the value of medical services and pay fees for examination that are in keeping with the value of the services rendered. In this issue of *THE JOURNAL* we publish a list of the companies paying \$5 for medical examination.

We may be a little bit old-fashioned in our conclusions, but we believe that the companies paying the \$5 fee secure on the whole better examiners and a higher grade of service. There may be, and probably is, a competent and conscientious man here and there who does not know what his services are worth, and is willing to take what he can get, but the general proposition that a cheap price gets a cheap man holds good in securing medical services the same as it holds good in any other profession or a trade.

Proficiency in medical practice is very much higher now than it was a few years ago, and it is secured and maintained at a correspondingly greater expenditure of time, effort and money. The returns should be correspondingly increased, and we venture to say are increased for the really proficient. It is very probable that some of the doctors who are making \$2.50 examinations for insurance companies are being paid all the services are worth, and perhaps are paid too much, but the really proficient doctor is worth more to the company, and if he has any sense of justice for himself he will not sell his services for a fraction less than they are worth. He knows that a thorough and reliable examination for life insurance is worth \$5, for many companies pay that price, and a similar examination of a private patient, less the clerical work entailed in filling out a long written report of the examination, invariably commands and brings a \$5 fee. There is, therefore, no logical defense for acceptance of anything less than \$5 for a life insurance examination by the really competent men. Of course, there will always be men who will make examinations for \$2.50, and there are many who even make examinations for \$1, but we believe we are right in saying that for the most part these men are not from the ranks of

the better qualified physicians, and if they are qualified and are making honest examinations they are greatly depreciating the value of their services.

CORRESPONDENCE

THE ANTIMENINGITIS SERUM.

BLOOMINGTON, IND., Oct. 24, 1908.

Editor THE JOURNAL:—I am writing you to ask you to make a note in *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION* of my appointment by Dr. Simon Flexner, of the Rockefeller Institute for Medical Research, New York, as agent for his Antimeningitis Serum in this section of the state. I would also like to suggest that you make an urgent request of the profession of the state to be on the alert for cases of epidemic cerebrospinal meningitis, and urge that they call upon Dr. Hoskins, of Indianapolis, or myself for the serum.

I have just returned from Boston, Mass., where I had postgraduate instruction in the department of children's diseases of Harvard Medical School. While on service in the Boston Children's Hospital as home physician, we tested Dr. Flexner's Antimeningitis Serum in a number of cases of epidemic cerebrospinal meningitis. The effects of the serum, as you are no doubt aware, are most brilliant indeed, equally if not more specific than the antitoxin for diphtheria. The mortality for the cases treated in the Boston Children's Hospital from 1899 to 1907 was 69 to 80 per cent. Since the spring of 1907, when the use of the serum was first introduced, the mortality has fallen to below 20 per cent. The use of the serum further prevents, in those that recover, the terrible sequelæ, as hydrocephalus, blindness, deafness, defective mentality, and other serious deformities.

The serum has been tested now in over 400 cases, with results most brilliant, and that point toward its being a specific remedy. Reports of cases in which it has been tried have come in from many states, including Massachusetts, New York, Maryland, Pennsylvania, Ohio, Illinois, California, Kentucky, Washington, and from England, Canada, Ireland and Scotland. But up to date not a single case in Indiana has been given the benefit of this great discovery. Yet the reports of the Board of Health show deaths from epidemic cerebrospinal meningitis. This must mean that the profession of the state is either failing to recognize the disease or is not aware of

the existence of this serum and the readiness with which it may be obtained.

Experience has proven a positive diagnosis can not be made (*antemortem*) of meningitis—tubercular, cerebrospinal or pneumococcic—without a lumbar puncture. Dr. Flexner's agents are not only able to furnish gratuitously the antimeningitis serum for all cases of epidemic cerebrospinal meningitis for which a request is made, but they are prepared to properly make the lumbar puncture for the diagnosis and the administration of the serum, or to show other members of the profession the same technique whenever so requested.

Again allow me earnestly to solicit you to make a strong appeal to the members of our profession in the state, through *THE JOURNAL*, to be on the lookout for cases of this disease and to not hesitate to apply to either Dr. Hoskins or myself for this serum and thereby help save a number of lives that the state must otherwise lose.

Thanking you in advance, not only in my own behalf, but for the people of our commonwealth, I am respectfully,
HOMER WOOLERY.

SOMNOFORM FATALITY.

THE GEORGE KNAPP SANITARIUM,

VINCENNES, IND., Oct. 6, 1908.

To the Editor:—On account of the widespread tendency of physicians, and especially dentists and laity, to view the use of somnoform as absolutely harmless, I feel that I owe it to the medical profession and the dentists to report a case that proved fatal.

For the benefit of those who may not be acquainted with the literature, I will state that somnoform is said to be made of chlorid of ethyl 60 per cent., chlorid of methyl 35 per cent., bromid of ethyl 5 per cent., and is claimed to be one of the safest of anesthetics, the death rate, as stated in several publications, being 1 to 250,000.

Harold K., aged 20 months, poorly developed, of strumous type, a mouth breather, showed nothing on examination except enlarged adenoids and tonsils. It was best to remove the adenoids in order to improve his respiration. He was given somnoform by means of the attached inhaler as per instructions. At the third respiration the patient became rigid, chest fixed, eyes opened, balls rolled up, pupils dilated and jaws set so that they could be hardly opened. Needless to say, as the first of these symptoms manifested itself somnoform was withdrawn. From

this rigid condition he gradually relaxed, but all attempts at resuscitation failed, though the heart could be felt to beat for several minutes after breathing ceased. Artificial respiration was kept up for forty-five minutes after all signs of life were gone. Strychnin and atropin were given hypodermically, all to no avail.

Satisfied that this death was caused by an idiosyncrasy, or that it was due to the fact that it was a strumous child, somnoform was still given at the sanitarium. A month later the following case presented itself:

John R., male, aged 13 years, strong, well developed, showed nothing on examination except enlarged adenoids, which at times interfered with breathing. Decided to do adenectomy. He was given somnoform by the same method as used in the preceding case, and at about the fourth or fifth breath went off in a rigid condition not unlike the other case, from which condition it took several minutes to restore him to natural breathing.

Since this one fatality, and the other case that came so nearly being fatal, somnoform is no longer given at the sanitarium. This report is not written as a criticism, but to acquaint the profession of this one fatality from somnoform and likewise to see if any other cases will be reported.

ROBERT CALDWELL, M.D.

House Surgeon to Dr. Geo. Knapp Sanitarium.

NITRITE OF SILVER GAUZE.

INDIANAPOLIS, IND., Oct. 19, 1908.

Editor THE JOURNAL:—I enclose herewith an interesting letter from Professor Rovsing, of Copenhagen, concerning nitrite of silver gauze. As you are doubtless aware, nitrite of silver gauze and nitrite of silver catgut are in general use in the Copenhagen clinics. As this is a matter of lively interest, perhaps you will care to use the letter in *THE JOURNAL*.

Very truly yours,

JOSEPH RILUS EASTMAN.

THE ROYAL FREDERIC HOSPITAL,

COPENHAGEN, 10 October, 1908.

Dear Doctor Eastman:—The preparation of nitrite of silver gauze is utmost simple: Pour a 1 per cent. solution of nitrite of silver into a sterilized yellow cylindric glass, stuff then pieces of sterilized gauze—of different greatness and form for the different purposes—into the solution at the bottom until the gauze is thoroughly moistened without being dropping, and the silver nitrite gauze is ready for use. I am using silver gauze in all wounds and cavities where

formerly iodoform gauze was used, in rectum, vagina, mouth and nose. For all suppurating cavities; so in osteomyelitis after chiseling and having cleaned the bone cavity, I fill this with solution of nitrite of silver and stuff then with dry gauze, so making at the same moment a tamponade with nitrite of silver gauze.

For septic peritonitis, appendicitis gangrenosa, salpingitis, etc., I introduce a Mikulicz gauze pouch into the cavity (fossa Douglassi, for instance) and fill this with strips of silver nitrite gauze.

In especially virulent infection I use a 2 per cent. solution for the preparation.

I never more shall use iodoform gauze with its bad odor, its poisoning properties and its doubtful antiseptic qualities.

Hoping that you will find this description sufficient and the gauze useful, I am sincerely yours,
THORVALD ROVSING.

DEATHS

DR. GREEN HAZLEWOOD, a graduate of the Medical College of Indiana in 1870, died at his home near Chambersburg, Ind., October 16, aged 73.

DR. FRANK CAMPBELL died suddenly at his home in Shelbyville, October 8, from heart disease, aged 39. He was a member of the American Medical Association and his state and county associations.

DR. BENJAMIN C. WRIGHT, Hospital College of Medicine, Louisville, 1891, formerly coroner of Clark County, Ind., a member of the Indiana State Medical Association, died at his home in New Albany, October 4, aged 45.

DR. FREDERICK A. HERRING, Goshen's oldest physician and one of its oldest residents, died October 1 from senile debility, age 96 years. He had been gradually failing in health for several months. Dr. Herring was born in Lennep, Germany, in 1812, coming to this country in 1855.

DR. ALONZO H. GOOD was born at Economy, Wayne County, Indiana, Sept. 22, 1843, and died on his sixty-fifth birthday, at his home in Muncie, from the effects of pneumonia. He served in the Civil War, taking up the study of medicine at its close. He practiced medicine at

Economy, Bloomingsport, Selma and Muncie. He was a member of the I. O. O. F. Lodge, Masons and G. A. R. Post, and of the county, state and national medical associations.

PERSONALS

DR. F. R. MORGAN, of Illinois, has located in Kokomo.

DR. FRANK J. SPILLMAN, Jr., Connersville, sailed for Europe October 1.

DR. W. E. RISINGER, formerly of Fort. Smith, Ark., has recently located in Bedford.

DR. OTIS L. SCHROCK, formerly of LaGrange, Ind., is now practicing in Greentown.

DR. G. W. H. KEMPER, Muncie, has been elected president of the Wilder Brigade.

DR. W. S. GRAYSTON expects to leave Marion and enter the practice of medicine at Huntington.

DR. J. M. MOULDER, of Kokomo, recently toured the southern part of the state in his automobile.

DR. WILLIAM L. HINES and DR. FRANK H. FOSTER, both of Warsaw, have entered into partnership.

DR. J. A. MATTISON, of the National Military Home, is spending his vacation in the woods of South Carolina.

DR. R. D. VARNER, who has been practicing for several years in Kokomo, has removed to Ridge Farm, Ill.

DR. O. E. HARROLD, of Marion, in alighting from his buggy, fell and sustained a fracture of the right clavicle.

DR. O. H. SWANTUSCH, of Metz, Ind., has moved to Butler and gone into partnership with Dr. W. F. Shoemaker.

DR. WILHELM T. VON KNAPPE, Vincennes, who was seriously injured several weeks ago, has recovered and resumed practice.

DR. C. M. HARRIS, Bourbon, has sold his practice to Dr. R. M. Stormont, of Posey County, Ind., and will locate in Casey, Ill., in the near future.

DR. T. B. EASTMAN has withdrawn from the Joseph Eastman Hospital at Indianapolis. Dr. J. Rilus Eastman will now have entire control of the institution.

DR. R. O. McALEXANDER, of Indianapolis, has visited, during the past summer, the well-known clinics of Europe, spending one month in Vienna, one in Berlin and one in London. He also made a visit of one week to Dr. Kocher's clinic in Bern.

DR. A. C. McDONALD and MRS. EDITH WEBB, both of Warsaw, were married on October 14. After the marriage, which took place at Marion, Ind., the home of the bride's parents, Dr. and Mrs. McDonald spent two weeks in visiting some of the Eastern cities, including Toronto, Boston, New York and Philadelphia.

NEWS, NOTES AND COMMENTS

ST. JOSEPH'S Hospital, Logansport, is under cover and is expected to be ready for occupancy January 1.

LIGONIER is reported to be suffering from an epidemic of diphtheria; twenty-seven positive diagnoses were made.

AT THE last meeting of the Kokomo City Council an ordinance was passed appropriating \$25,000 for the purchase of a site and the construction and maintenance of a public hospital.

THE Newcastle Physicians' Association was organized September 22, Dr. Elmer H. Brubaker being elected president; Dr. H. H. Koons, vice-president, and Dr. Clifford E. Canaday, secretary-treasurer.

THE semi-annual open meeting of the Fort Wayne Academy of Medicine was held Nov. 12, 1908. The evening was given over to the discussion of some medicolegal questions presented by City Attorney Guy Colerick. A number of lawyers were present as guests of the society and added materially to the free discussion that is characteristic of this society of younger medical men. A banquet-smoker at the Homestead Café followed the meeting.

DR. AND MRS. CHRISTIAN B. STEMEN, formerly of Ft. Wayne, but now of Kansas City, Kan., celebrated their fiftieth wedding anniversary on November 7. For many years Dr. Stemen was dean of the Fort Wayne College of Medicine, and he took an active part in the amalgamation of the medical colleges of Indiana to form one medical school under state control. He now holds the position of emeritus professor of surgery in the Indiana University School of Medicine.

THE following item has been received from the Ohio Board of Medical Registration and Examination for publication in *THE JOURNAL*:

"The State Medical Board has received information that some medical students, having preliminary educational requirements less than demanded by the Ohio law, have been induced to attend medical colleges in other states, under the impression that after graduation they can return to and obtain a license to practice in Ohio under reciprocity. This should be corrected. All medical students who have or who contemplate matriculating in colleges in other states with such impressions should understand that a license from another state is accepted in place of an examination only. The applicant in all other particulars must comply with the laws of Ohio and the rules of this board. The preliminary educational attainments must be the same as required of students of Ohio colleges."

AMONG those companies paying the \$5.00 rate for life insurance examinations are the following: American National Life, Galveston, Texas; Anchor Life, Indianapolis, Ind.; Boston Mutual Life, Boston, Mass.; Citizens' Life, Louisville, Ky.; Commonwealth Life, Louisville, Ky.; Capital Life, Denver, Colo.; Colorado National Life, Denver, Colo.; Connecticut Mutual Life, Hartford, Conn.; Equitable Life of New York; Etna Life Insurance Co., Hartford, Conn.; Fort Worth Life, Fort Worth, Texas; Guarantee Life, Houston, Texas; Manhattan Life, New York; Massachusetts Mutual, Springfield, Mass.; Mutual Benefit Life, Newark, N. J.; Mutual Life of New York; National Life, Montpelier, Vt.; New England Mutual Life, Boston, Mass.; Northwestern Mutual Life, Milwaukee, Wis.; Pacific Mutual Life, Los Angeles, Calif.; Pacific Mutual Life, San Francisco, Calif.; Provident Life & Trust Co., Philadelphia, Pa.; Reliance Life, Pittsburg, Pa.; Southwestern Life, Dallas, Texas; State Mutual Life, Rome, Ga.; Southern States Life, Atlanta, Ga.

SOCIETY PROCEEDINGS

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY.

(Meeting of Sept. 8, 1908.)

Society met in joint session with the Northern Indiana Dental Society in the assembly room, Tuesday evening, with twenty-seven members present. Dr. W. D. Calvin read a paper on

Etiology and Prophylaxis of Harelip and Cleft Palate.

Dr. G. E. Johnson gave a lantern slide demonstration of the operative procedure in harelip and cleft palate.

In the discussion Dr. Porter said that it was an established fact that defectives are apt to breed defectives of some sort; that is to say, a club-footed individual is more apt to breed a case of scoliosis or cleft palate than is a person of good ancestry. He said that if too much is promised these persons operated on for harelip and cleft palate in the way of phonation they will be displeased when they grow up. The object of operating early is to commence to train the patient very early to do well with an imperfect palate, and not because we hope to give the individual a perfect palate. If he is operated early he commences talking early with as perfect a palate as he has, and finally learns to use it very well.

Dr. McOscar reported being present at one of Dr. Brophy's operations for harelip and cleft palate, and saw Dr. Brophy gain a very excellent function for the child, who had been born very badly deformed. The defect was a perfect cleft of both the palate and lip.

Dr. Buchman said that heredity and arrested development needs to be studied more than it has in the past, and we will have to take up Mendel's law of heredity and study it if we want to find out the facts, and apply it to these cases, after which it can be said with absolute certainty whether these cases are due to hereditary influences or some intra-uterine accident. In Mendel's law you can trace the heredity from one generation to another and you can make a calculation as to how many in a given family will escape the influences of the hereditary taint and how many others within a certain limited number are going to be affected by it. He believes that a good many of these cases of harelip and cleft palate are due to intrauterine accidents.

Dr. Nierman said that Dr. Brophy's operation has in its favor the age of the child to be operated on. Sensation in the first few hours of life is not very pronounced, and the action of the heart is stronger and of greater vitality than later in the age of the patient. He said that when viewing the situation for an ideal method of procedure he thinks that Dr. Allen's operation comes more closely to meeting the plan than any known to him. His conception is to bring the membranous surface of one side of the nasal cavity to act as the oral surface in the mouth; he transfers a flap from the mouth to the floor, the base of the nasal passage, making the two outer sides membranous and the apposing surfaces raw tissue. The blood supply is not cut off and the union of these parts should be good.

Closing the discussion Dr. Calvin said that the study of Ribot's work on the subject of heredity is most

interesting and logical, and extremely stimulating to further investigation and study of the subject. Conclusions without proper amount of study should never be made. One of the laws of Nature is that like begets like. If like does not beget like in exactness, defects beget other defects, as Dr. Porter has said, and as seven or eight of the cases I have cited, have shown. Some have shown spina bifida, club foot, deformities of the hip, physical deformities and mental deformities. If we would give these cases more careful study in looking up the family history, in studying the mentality and physical condition of the parents, and especially of the mother of such children as these, we would in the future be able to refer cases with a history that is complete, much more so than I have found in the literature read.

Adjourned.

J. C. WALLACE, Sec.

(Meeting of Sept. 15, 1908.)

Society met in regular session in the Assembly room, with thirty members present. Minutes of two previous meetings read and approved.

Operation in Diffuse Peritonitis, with Obstruction of Bowels in Typhoid.—Clinical case report by Dr. M. F. Porter. Patient, man aged 48, referred by Dr. Murphy, of Antwerp, Ohio. On operation found perforation of the bowels, and later found that he was suffering from typhoid fever. The patient gave history of having suffered with femoral hernia ever since he could remember. He had always been able to reduce it until two weeks previous. Patient called Dr. Murphy, who was able to reduce it without trouble. Forty-eight hours before admission to the hospital he suffered from sudden excruciating pain in the abdomen, and sent for the doctor, but he was unable to cause the bowels to move. On examination diagnosis of diffuse peritonitis with obstruction of the bowels was made. On account of pain in the right side, a diagnosis of appendicitis as the origin of the trouble was made.

In operation, a midline incision was made, and belly found full of pus which seemed to come from the region of the liver or right kidney fossa. Appendix was examined and found healthy. On manipulations of the intestines a perforation was found in the small intestine, on the right side, high up, the perforation being about the size of a 48-calibre bullet. It was closed in the usual way. The abdomen was washed out and drain placed in the neighborhood of perforation, and one placed lower in the pelvis. The patient made an uninterrupted recovery following the operation.

About a week after the operation he was still running a fever, which was getting higher; he had headache, general malaise, anorexia, etc. An examination of the blood by Dr. Rhamy showed a positive Widal reaction. It was concluded that this patient was suffering from typhoid perforation of the ileum, as some blood streaks appeared in the stools prior to the operation.

Struma Nodosa.—Dr. Porter next presented a thyroid gland, unusually large, a form of struma nodosa, and perhaps colloid variety. This is the most common form of enlargement of the thyroid. The upper portion showed the wall of the cyst, which was firm, beginning calcareous deposits. In the other portion was an unusually distinct nodule. These very seldom develop in the upper aspect of the gland, but usually, as in this specimen, in the lower border. This speci-

men is of the vascular type; the goitre capsule being very vascular, as were also the tissues of the neck. Dr. Porter thinks that on two or three occasions he had as many as twenty-four forceps on at once, then ligated, went on with the operation, used forceps and later ligated again. He spoke of the difficulty of avoiding recurrent laryngeal nerve and parathyroids on account of the extreme size of the gland. He thinks best to leave a small portion of the gland in order to avoid cachexia, and the posterior capsule to avoid injury or removal of the parathyroids. He said that if parathyroids do happen to be removed, the administration of parathyroid glands overcomes the tendency to tetany.

In opening the discussion, Dr. E. J. McOscar, speaking on typhoid perforation, referred to the case of a laboring man, working to Saturday night, taken to hospital Sunday noon, with extreme shock, pulse 150, temperature 95, which gradually rose to 107, and he died thirty hours after admission.

Dr. Beall said that he had recently read an abstract of a paper by some German reporting having removed the thyroids and parathyroids from a dog, and failed to get tetany before it died from adrenal insufficiency. The question of connection between parathyroids and adrenals is interesting.

Dr. Porter, in closing the discussion, said that it is now established that most perforations occur in walking typhoid cases. To save parathyroids leave some part of the thyroid gland, barring malignancy. The four cardinal points in the operation are: (1) Avoid much hemorrhage; (2) avoid injuring or removing parathyroids; (3) avoid injury to recurrent laryngeal nerves; (4) leave a part of the gland.

"European Surgery" was the title of a talk by Dr. E. J. McOscar, who recently returned from a trip on the continent. He said that at Rome they have a magnificent and extensive hospital under charge of the government. He was accompanied through the hospital by two physicians and an undergraduate, the latter being an Italian interpreter. The equipment is good for doing modern surgery; the wards clean and well ventilated.

At Bern, Switzerland, contrary to common report, goitres are not plentiful. He saw one on the streets, outside of hospital where they always make up a part of the Kocher clinic. It may be that most of these people have had their goitres removed, Kocher and his son having removed 3,700. Dr. McOscar spoke on the simplicity of dressings. In every abdominal wound, whether in midline or appendiceal region, it is dressed with four thicknesses of gauze about six inches long, brushed with collodion, another layer and more collodion, and another layer and collodion until a splint is made. No abdominal bandage is used. General suppurative peritonitic cases are closed without drainage in Kocher's clinic, the abdomen being opened, wiped out, and closed up tight. Of course, there must necessarily be some selection of cases for this kind of procedure.

Dr. Kocher did four goitre operations, two large and two small, with the patients in a semi-sitting posture, under novocaine and adrenalin anesthesia, the patients never stirring. He used about 75 artery forceps, and it took assistant a half hour to close up the wound, with no groan from the patient. Silk ligatures and sutures were used, and glass tube put in for drainage, to be removed the following day. Metal clamps were used to close the skin after operations. They have the

advantage of not carrying infection through the skin along the track, and can be removed as warranted. One man uses catgut soaked in juniper oil for two or three months, as it is strong and durable.

At Zurich the sterilizers are in a separate room from the operating room, and there is an opening from the sterilizers into the operating room, and sterilized dressings, etc., are taken through this opening directly into the operating room. At Vienna the best general surgical clinic is conducted by Silbermark, the best orthopedic surgery by Lorenz, the best paraffine injections by Prof. Gersuny. Wertheim is one of the best men in Vienna in operations devised by himself.

A surgeon who goes into the abdominal cavity should be able to do whatever he finds to do within. Dr. McOscar saw a gynecologist make a creditable hysterectomy who also operated the same case for gallstones and was clearly out of his accustomed field, much to the disadvantage of the patient.

He spoke on the method of preparing patient. If it is a walking case it is put on the table and covered up, then covered with soap and lather for ten minutes by the surgeon. The surgeon then washes himself and gets on gown, doing all the preparation himself. Sometimes the patient is under the anesthetic a half hour before the surgeon starts to operate. They do not care much for modesty. The patient is put on the wagon and stripped. For anesthetics they use ether, chloroform and alcohol, and no pure chloroform is used. For suture material silk is used very extensively. The silk is boiled 25 minutes, put in formalin 3 per cent. for three days, and then boiled with the instruments.

Dr. Boyd, of Charing Cross Hospital, London, uses sewing machine twist. Dr. McOscar saw him operate, amputating foot under spinal anesthesia, absolutely successfully.

Bier's clinic was the only place where he saw collars and vests worn through long clinic by the surgeons and assistants. He did not see any wound closed with adhesive plaster.

In discussing this subject, Dr. Bulson said that the surgeons in Germany seem to have very little regard for danger from anesthesia. He saw one case in Berlin where the patient was asleep from 8:30 to 1:30. He said that he had followed some of the cases operated on in clinic for mastoid trouble, and found that there were not such a large proportion of them cured. Some of the results of operation in foreign clinics are very interesting. On the whole, the surgical work in Europe is not better than in this country, and in some clinics and certain kind of work it is not as good as in America.

In closing, Dr. McOscar said that surgical clinics in Germany are excellent.

The Ophthalm-Tuberculin Reaction was the title of a paper by Dr. Chas. G. Beall.

In the discussion Dr. Rhamy condemned the ophthalm-tuberculin reaction, saying that it was dangerous.

Dr. Metts, of Ossian, said that in one case in which he used it the patient developed a corneal ulcer and he thought the patient was going blind. He had tuberculosis all right. He thinks it is good collateral evidence.

Dr. Morgan said that Arnold Knapp reports a case of interstitial keratitis in a perfectly healthy eye from the use of tuberculin.

Dr. Weaver stated that from the evidence he has been able to gather the consensus of opinion is that

the ophthalmotuberculin test is no more reliable than the subcutaneous.

Dr. Bulson said care should be taken in its use, as he has seen on five occasions bad results from its use. The subcutaneous test should have the preference.

Dr. Drayer said that it is applicable to the class of cases where the subcutaneous test is not advisable. He said that it should not be discarded on account of a few bad results. It has its particular applicability in children. Drs. Dancer and Mouser also discussed the subject.

In closing Dr. Beall said that people should not be in too much of a hurry to pass judgment on it until more is known about it.

On motion the meeting of October 27 was postponed on account of the meeting of the Twelfth District Medical Society.

Dr. Porter suggested that hereafter arrangements be made to have the meeting of the Twelfth District Society on some night that will not interfere with the Allen County Society meetings.

Dr. Weaver asked the aid of the society to get the Library Board to bind journals.

Adjourned.

J. C. WALLACE, Secretary.

(Meeting of Sept. 22, 1908.)

Society met in regular session at the Assembly room, with thirty-five members present. In the absence of the president and secretary the meeting was called to order by the vice-president, Dr. C. R. Dancer. Dr. E. E. Morgan was appointed secretary pro tem. Regular secretary arrived later in the evening and assumed his regular duties.

Enuresis Due to Enlarged Tonsils and Adenoids.—Dr. Bulson reported a case of enuresis totally relieved by the removal of tonsils and adenoids in a girl 16 years of age. He also reported a similar result in a boy.

Decompression for Choked Disc.—Dr. Bulson reported an interesting case of choked disc left eye, and atrophy right eye, in which he diagnosed intra-cranial lesion, and skull was opened to relieve the pressure which he assumed existed. The patient is relieved but is still in the hospital. A full report will be given later.

In discussing the report Dr. Weaver said that the decompression operation in Dr. Bulson's case had improved the general condition of the patient as well as improved the vision.

Dr. S. H. Havice asked if anti-syphilitic treatment had been given and reported a case of choked disc without any history except failure of vision. Patient recovered in about one year on K. I., but the condition has again returned.

Collections was the title of a paper by Dr. B. P. Weaver, in which he said that to his mind justly earned gratitude is the greatest stimulant and the most acceptable compensation that comes into a doctor's life. And if such gratitude could only furnish a livelihood for the doctor and his family the problem might perhaps be solved. But unfortunately this is not so, and the physician is forced into that field which is by nature distasteful to most of us, and in which few of us are adept, viz., the rôle of the business man. To him who does, however, decide in favor of medicine for his life work, it becomes a plain duty to avail himself of all just and honorable means to maintain his collections at a legitimate maximum, a duty to himself, his family and his patients.

Proper Medical Fees; How Maintained.—Paper read by Dr. E. M. Van Buskirk. There is not a physician in this society who does not know what he should receive for any service rendered. If his services are up to the standard he should demand proper compensation. The doctors who charge fifty cents a call to people who have paid better fees do it to obtain business and know that they either undervalue their services or unjustly accept money for services they can not perform. Competition and customers are two causes for low fees. By charging small fees a physician may be able to get a great many of his competitor's patients. If he is capable and succeeds in this way he would no doubt succeed by charging proper fees. People usually employ and retain a man for his ability, and will not continue his services indefinitely because he is cheap. Then, again, the mechanic receives five or six times more for this work than he did half a century ago, and yet the doctor receives about the same. Should not the tradesman, therefore, receiving more for his time, be willing to pay his doctor in proportion? Physicians are also, by their unbusiness-like competition, imposed upon by outside interests, such as insurance companies and railroads. Competition, such as it is, is very injurious to the medical profession as a whole, as each one tries to succeed regardless of any welfare or embarrassment to any other physician. No physician has a right to pursue any course for his own benefit at the expense of others without their consent. Medical proficiency at the present time is only obtained at a greater sacrifice of time, energy and money than was required a few years ago, and the advance in our standard of efficiency entitles us to the same increase in returns that comes to those in other walks of life who have made advances.

A Few Things We Owe the Public was the title of a paper by Dr. C. R. Dancer, in which he said that "our duties may be divided into (1) those that we owe the patient, (2) those due the state, and (3) those due ourselves. These duties become cooperative, and, after all, may be summed up as our plain duty, or in modern phraseology, a square deal. One thing we owe the public is the elimination or at least the minimization of quackery and the spreading of information concerning preventable diseases. Should the doctor enter politics? Let us answer this question by pointing to the work done by those representative members of our profession who are now in politics. Roosevelt sent Dr. Reed, of Cincinnati, into the canal zone to investigate existing conditions: Colonel Gorgas was appointed a member of the Canal Commission, and let us give Dr. Wiley credit for his share in the enactment of the Pure Food law. Did not the Japanese medical profession play the greater part in defeating Russia? Our own local board and the state board of health have done much with reference to pure milk, meat, etc., and our local board is now sending appropriate literature to the homes of people quarantined with any of the infectious diseases, thus enabling the physician to better carry out the method of treatment. We owe it to ourselves, our patients and the public to give our best service in remedying or correcting those conditions dependent upon influences which we as physicians are familiar with."

Opening the discussion, Dr. Havice said that we should charge proper and reasonable fees and do good work to earn them. The man who charges good fees

is always thought more of than the man who charges small fees.

Dr. McOscar said that the physician is the loser nine times out of ten when he is lax. If he demands good round fees and requires early settlement he will make more friends and be better off financially. In cases where you suspect or have good reason to believe that the patient has been to another physician and not paid him, it is wise to call up the other physician and let the patient know that you know he has not squared himself with the other physician. Notorious abortionists should be put out of business, and if a man has the stammina to proceed against this class he should have the support of his medical brethren.

Dr. Bulson said that the average general practitioner is too poorly paid, and all because reasonable and just fees are not charged and collected. The charge for a visit in the city is \$1.50, in most instances, and some doctors never charge but \$1.00, and this condition existed twenty years ago when it took less time, energy and money to become a qualified practitioner, living expenses were not so high and the people were not so able to pay just fees as now. Many doctors have no business ability and do not collect what they earn, and they have not the good sense to charge fees that are in keeping with the services rendered. These men make it more difficult for their confrères to charge respectable fees and collect them. The man who gives his patients proper attention according to present standards of medical practice is deserving of better fees than generally charged in Fort Wayne, and he can get better fees if he insists upon having them. The public generally values a man's services at about the price which the man himself fixes upon for those services, providing the price is anywhere within reason. If good service is rendered, the public stands the fees, but if the service is poor the public rebels. Many men who charge low fees are really getting all or more than their services are worth. The proper way to establish a fee bill is to publish in the daily papers, as they did in a Texas town, a statement to the effect that the undersigned doctors, giving the names, believe their services to be worth such and such fees, and that they will charge accordingly, but that some doctors who realize their incompetency and lessened value for services rendered will charge less. No doctor who permits his name to be attached to such a statement will dare to cut fees, for by so doing he would at once lay himself open to the opinion of the public that he did not consider himself competent to be classed with his confrères and consequently was willing to work for less. The doctor's best friends and most appreciative patients are those who pay good fees and pay them promptly. It is good policy to present bills at least once each month, and it is poor policy for physicians not to uphold each other in efforts to secure proper remuneration and prompt settlement of accounts. If one doctor gets a good fee it helps others to obtain good fees, and doctors should sustain one another in efforts to obtain just remuneration.

Dr. Henderson said that he had found that a personal presentation of the bill by the physician himself is the best means of effecting settlement and the

sooner the bill is presented after the services are rendered the easier it is to secure payment and retain a satisfied patient.

Dr. Bower said that there are many people who change doctors in order to avoid the payment of bills for medical and surgical services, and we ought to re-establish the "dead beat list" which the society started several years ago. The doctor who has a few good pay patrons is better off than the doctor who has many patrons, the majority of whom pay little or nothing. The doctor who furnishes medicines should charge extra for the medicines.

Discussion closed by Drs. Weaver, Van Buskirk and Dancer.

Adjourned.

J. C. WALLACE, Secretary.

(Meeting of Sept. 29, 1908.)

Society met in regular session in the assembly room, with twenty-four members present. Minutes of two previous meetings read and approved.

Phraseology of Bone Fractures was the title of a paper read by Dr. H. G. Nierman, in which he said that coined names for lines and degrees become essential items in the phraseology on fractures, whereas location and other details are apt to assume the names of authors or the like for synonyms of distinction. When the lines of a fracture radiate from a central point and they are distinct in form, the character is termed a stellate. Where the fragments are small and the point of radiation is not pronounced the same is understood to be comminuted. If several parts are broken and healthy bone intervenes, the word multiple implies such a condition. Transverse, oblique, longitudinal, T-shaped, or V-shaped are self-explanatory and require no comment. If the whole thickness of the bone is traversed by a fracture it is said to be complete; when less in extent, incomplete. Should the lines of fracture be fissured, the break is spoken of as fissured. Depressed denotes that the fragments are pressed down below the surface of the bone. Simple, compound and complicated are of relative importance as follows: The ordinary closed fracture is of the first kind mentioned. If laceration communicates the wound with the surface of the skin, open fractures, the second title is appropriated to define it. Should a large blood vessel, nerve, joint or internal organ become implicated, the complexity makes the fracture a complicated one. Traumatic fractures are caused as the result of violence to bones that were primarily healthy. Necroses or caries induced from poisons of diseases that produce such conditions in bones and tumors that make the adjacent or affected bone fragile will dispose to a fracture.

In the discussion Dr. Porter said that there are too many proper names without adequate descriptions of fracture used to name fractures. He said that he is opposed to the introduction of proper names to describe pathological conditions such as Graves' and Basedow's disease; the same applies in operations. His objection is that by using proper names we do not signify anything, and often give priority to individuals to whom such credit does not belong.

Acute Osteomyelitis; Etiology, Symptoms and Treatment.—Paper by Dr. G. L. Greenawalt. Chil-

dren are peculiarly liable to this disease. The starting point is the anatomical condition favoring localization of infection micro-organisms. The essential symptoms are chill, pain, tenderness, redness, swelling, synovitis, etc. Pain is the earliest and most constant symptom; and the reasons for failure to make a diagnosis are not usually due to lack of ability but hasty and incomplete examination. He cited two cases of multiple osteomyelitis where treatment had been given for rheumatism. He spoke of the effect of the unyielding bony case and venous stasis from thrombophlebitis in disseminating sepsis, and the reasons for the absence of swelling in the early days of the attack. He also mentioned the differentiation between serous synovitis and suppurative synovitis as complications, taking up exploratory puncture. The early diagnosis and differentiation from other maladies, rheumatism, gonorrheal rheumatism, typhoid fever, tubercular arthritis, and cellulitis, is very important. As to treatment, prompt action is necessary to save a useful limb and promote early recovery. The author spoke on the responsibility of the general practitioner, and the sequence of not recognizing a rapidly destructive process. Radical treatment and immediate drainage is imperative. Constitutional treatment has its good effect, but proper drainage and proper dressings relieve the burden of giving much medicine. The expectant plan of treatment in acute osteomyelitis is trifling with fate and inviting disaster.

Opening the discussion, Dr. E. J. McOscar said that we must recognize that osteomyelitis is a surgical disease and, therefore, treat it surgically.

Dr. M. F. Porter said that multiple osteomyelitis of acute variety manifests itself in the medullary canal of bones and is usually due to streptococci or staphylococci invasion. Osteomyelitis may be due to typhoid, tubercular, syphilitic or gonococci invasion. In tubercular osteomyelitis, if not complicated with pus organisms, it is best not to open. On the other hand, the best treatment of cases of staphylococci infection is to open. When there are tubercular and other germs present, the physician must oftentimes combine various methods of treatment. He spoke on the relative frequency of osteomyelitis with periostitis. Periostitis is one of the rarest of rare conditions except as secondary to osteomyelitis. After the medullary canal is opened, the more the curette is used, all things being equal, the more harm you are liable to do. The simple opening is often sufficient, with drainage.

Dr. Henderson asked about encasing the limb, and, in closing the discussion, Dr. Greenawalt said that the matter of encasing the limb should be left to the surgeon to decide. He spoke of the use of Beck's paste in sinuses, injecting the same, and then putting to rest. This paste is composed of bismuth subnitrate, 30 parts; vaselin, 60 parts; soft paraffin, 5 parts; formalin, 1 part; white wax, 5 parts.

Phosphaturia was the title of a paper by Dr. L. P. Drayer, calling attention to phosphaturia vera and phosphaturia spuria.

The paper was discussed by Drs. Rhamy and B. Van Sweringen, and the discussion was closed by Dr. Drayer.

Dr. A. P. Buchman made a motion, seconded by Dr. English, that the chair appoint a committee of three to draft a scheme, or plan of procedure, in accordance with the spirit of the papers read at the last meeting, relative to collections, fees, etc. The chair appointed Drs. Weaver, Van Buskirk and Dancer.

Adjourned.

J. C. WALLACE, Secretary.

ELKHART COUNTY.

The Elkhart County Medical Society met at the office of Dr. Yoder, Goshen, on October 1, Dr. Snapp presiding. The secretary being absent, the chair appointed Dr. Norris secretary *pro tem*. Minutes of previous meeting read and approved.

Hiccough.—Case report by Dr. M. K. Krieder. Patient, woman, 40 years of age, healthy in appearance, but an invalid for years, which invalidism has been getting progressively worse. Examination showed a lacerated cervix, eroded os, and hemorrhoids, with subjective symptoms of various kinds. At one time patient suffered with a marked attack of hiccoughing. Dr. Krieder recommended dilatation of sphincter ani, which was done, with immediate relief of hiccough. This dilatation was repeated in about one month, and permanent relief was promised by repairing the laceration and relieving the hemorrhoids, "thereby instituting sympathetic nerve force and a better capillary circulation."

In opening the discussion Dr. Fleming said that he considered this a case of nervous hiccough which simply demonstrated the value of suggestion. He did not doubt that the procedure adopted in this individual case was all right to relieve the patient temporarily, but he thought that in the treatment of these neurotic cases in general the medical profession should refrain from drugging them and tell them frankly that there was nothing serious the matter with them, that the condition was purely a nervous one from which they would recover if they could get their minds off themselves. He considered it a great mistake to operate in the neurotic cases unless they presented absolute evidence of organic disease, and even then during their convalescence they should be treated by the method of re-education which was outlined so well by Barker in the *American Journal of the Medical Sciences* a few years ago. When the profession handles these cases in the proper manner they will take out of the hands of the Christian Scientists and osteopaths the bulk of those nervous cases which is their stock in trade.

Dr. Norris said that many of these neurotic cases are anemic or give evidences of autointoxication such as indicanuria, and he recommended appropriate treatment of these conditions.

Dr. Matthews of New Paris stated that hiccoughing can usually be cured by diverting the attention of the patient into other channels, which was all that dilatation of the sphincter would do.

"Typhoid Fever" was the title of a paper by Dr. Yoder, in which he said that the diagnosis of typhoid fever is of peculiar interest, first, because it is a common disease; secondly, because it may be quite atypical and hard of recognition; and, third, because the mor-

tality is comparatively high. In 1890 the death rate of typhoid fever in the United States was 46.27 per 100,000 of population. In Indiana, in 1901, the rate was 56.8. This was eighth in the list from all causes of deaths, there being thirty-two other causes of death whose percentage was lower than that of typhoid fever. Often the diagnosis is not made until the disease is well established, or even not until convalescence sets in, as the diagnosis may be difficult, so difficult that every available source of information must be sought before final judgment is rendered. No diagnosis of typho-malaria should be made unless it is definitely proven that the patient is infected, both with the plasmodium malariae and the bacillus typhosis, which condition is rare. He said that if called to see a case of continued fever, it is his invariable rule to inquire into a possible prodromal period of lassitude and exhaustion, a possible existing cough, and whether bleeding at the nose has occurred. If these conditions have existed, and if he finds an enlarged spleen, he makes a diagnosis of typhoid fever, or if he finds rose spots, although a palpable spleen is absent, a diagnosis of typhoid fever is also made.

To further aid in the diagnosis of typhoid fever, we have confirmatory tests such as the reaction of Ehrlich, Widal's reaction, and the isolation of the bacillus of Eberth from the blood, from the urine, from the stools, or from the rose spots.

There is no leukocytosis in uncomplicated typhoid fever, which helps to differentiate various septic fevers and acute inflammations. Perforation with peritonitis in typhoid, however, is accompanied by leukocytosis. The differential diagnosis must exclude malaria, miliary tuberculosis, septic processes, pneumonia, meningitis, tubercular peritonitis, appendicitis, and malignant endocarditis.

He said that the diagnosis of typhoid fever must often be tentative, and the patient must be carefully watched and investigated, and as evidence accumulates we must be prepared to render final judgment.

Dr. Hoopingarner also read a paper on the subject of "Typhoid Fever."

In opening the discussion, Dr. Miller said that he considered diarrhea a favorable symptom, and when it was not present it was his custom to give laxatives, usually calomel. He considered it of particular diagnostic value if the fever was higher than the other symptoms would seem to indicate. Dr. Work, Jr., insisted on the value of the diazo reaction, and called attention to an error in diagnosis which was often made. The ring at junction of sulphanilic acid and sodium chlorate solution with aqua ammonia, must be rose red and not brownish red to indicate typhoid, and the foam on top must be rose pink.

Dr. Krieder called attention to the similarity between inflammatory rheumatism and typhoid.

Dr. Snapp took exception to the statement that antiseptics were of little value. He considers them of much value in prevention of fermentation and distention. It is his custom to use salol. He also urged sponging, often with tepid water, in those cases where baths could not be instituted.

Dr. Holderman spoke of his experience among the Amish. For religious reasons they would not permit

any form of hydrotherapy. His usual treatment consists of internal antiseptics and laxatives for constipation, and a modification of the Woodbridge treatment.

The applications of Drs. M. T. Brumbaugh, Harry T. Barber and Chas. W. Haywood were reported on favorably by the board of censors and they were elected to membership in the society.

Adjourned.

ALLEN A. NORRIS, Sec. *pro tem*.

GRANT COUNTY.

The regular meeting of the Grant County Medical Society was held October 27. At this meeting it was voted that each member of the society write the state senators, congressmen, and congressmen-elect urging them to support the policy of concentrating health bureaus into one department.

The paper of the evening was by Dr. J. E. Johnson, on "Eczema of the Conjunctiva," in which he said that the characteristic lesion of eczematous conjunctivitis is a small elevation about the size of a millet seed, composed in the main of leukocytes and situated either on the bulbar conjunctiva or on the cornea. This elevation is rarely seen clinically, for by the time the patient presents himself for treatment the thin epithelial covering has ruptured and a small superficial ulcer remains. The two chief symptoms of this disease are lachrymation and photophobia. The eyes are distressingly sensitive to light. The intense photophobia causes blepharospasm, and the lids snap shut like the jaws of a vise. The affection in its milder forms lasts from one to two weeks; where we have several ulcers and deep invasion of the cornea the course is correspondingly long. The tendency of the disease to recur is proverbial; oftentimes one attack has hardly subsided before new lesions appear and the patient is in the throes of a second. The treatment in these cases should consist of nothing irritating to the eyes, especially during the height of the inflammation.

Dr. F. B. McBride was given a transfer card to the Sullivan County Society.

Adjourned.

O. W. McQuown, Sec.

GREENE COUNTY.

The Greene County Medical Society held its regular meeting at Worthington, October 15. Meeting called to order with President Knoefel in chair and twenty-three members and visitors present.

"Responsibility in Mental Disease" was the title of a most interesting paper by Dr. H. R. Lowder of Bloomfield. The paper was discussed by all the members present and ordered sent to THE JOURNAL for publication.

Motion made and seconded that the chair appoint a committee of three to revise the fee bill and report on fraternal insurance examination fees at the next meeting. Carried. Drs. J. E. Talbott, H. R. Lowder and J. W. Gray were appointed.

Mr. Weims of the Worthington Times addressed the society in a pleasing and happy manner, and on motion was made an honorary member of the society.

The subject for the next meeting is "Epilepsy," and papers will be presented by Drs. Lukenbill and Mallett.

Adjourned.

FRANK A. VANSANDT, Sec.

HOWARD COUNTY.

The Howard County Medical Society met September 4, after an adjournment of three months, with a large number present. The paper of the day was on the subject, "Corneal Ulcer," by Dr. Will J. Martin, and was freely discussed by all present.

Adjourned.

WILL J. MARTIN, Sec.

* * *

The society held its regular monthly meeting October 2, in the Carnegie Library. Dr. A. A. Martin presented a paper on "Typhoid Fever." It was an excellent paper, stimulating a general discussion. The paper dwelt at length on the etiology of the disease and on the necessity of early differential diagnosis.

Dr. O. D. Hutto was appointed to read a paper at the district society meeting to be held at Crawfordsville.

Adjourned.

WILL J. MARTIN, Sec.

KOSCIUSKO COUNTY.

The regular meeting of the Kosciusko County Medical Society was held on October 20. Meeting called to order by President Long. Dr. W. S. Leiter of Claypool read a paper on the subject, "Changes in Other Organs and Structures During Pregnancy." This paper was discussed by Drs. Warvel, Bash and Howard. Dr. C. E. Leedy, Piercetown, read a paper entitled, "Diagnosis of Pregnancy; Eclampsia," which was discussed by Drs. Leiter, Burket, Howard, DuBois, Long, Warvel and Cary.

Congratulatory resolutions were passed in regard to the marriage of Dr. A. C. McDonald of Warsaw.

Adjourned.

C. NORMAN HOWARD, Sec.

LAPORTE COUNTY.

The LaPorte County Medical Society met in regular session October 9, with Vice-President Hollenbeck in the chair. The papers of the afternoon were by Dr. H. H. Martin, on "Cancer of the Uterus," and Dr. Bowers on "Locomotor Ataxia." Dr. Martin illustrated his talk with several pen and ink drawings. The next meeting of the society will be held in Michigan City, Dec. 11, 1908, for election of officers.

Adjourned.

JAMES W. MILLIGAN, Sec.

LAWRENCE COUNTY.

The Lawrence County Society met in regular session at Bedford, September 3, with fifteen members and two visitors present.

Dr. Emery read a paper on the subject, "Puerperal Septicemia," showing a diversity of opinion on the drug treatment of this trouble. The author said to take care of any wound in the genital tract, carefully curette, using a dull instrument, and then wipe out the uterine cavity with the following solution: equal parts compound tincture of iodine, carbolic acid and glycerin. He does not favor the intrauterine douche, but others claim good results from it. He believes iodine to be the ideal antiseptic in this condition, and in a direct streptococcal infection antistreptococcal

serum to be of great value. Special attention must be paid to elimination.

Dr. Risinger, in discussing this paper, said that prophylaxis is everything.

At the afternoon session Dr. Short read an excellent paper on "Constipation," which was followed by a lengthy discussion on the causes and modes of treatment. Two cases of appendectomy were reported, and a photograph of an advanced condition of a carcinoma of the forearm was shown.

Dr. Hays spoke against the two frequent use of coal-tar headache remedies, citing a case in which he believed death was due to this cause, as the patient had been a constant user of acetanilid headache tablets.

MADISON COUNTY.

The Madison County Medical Society met in regular session October 27, with Dr. Alexander in the chair. Diphtheria was the subject for discussion. Dr. J. W. Crismond, of Anderson, read a paper on its history and treatment from the earliest history to the discovery of antitoxin. Dr. Samuel E. Earp, of Indianapolis, read a paper on "The Modern Treatment of Diphtheria," or the serum treatment, which very thoroughly covered the subject. The public school board and teachers and the ministerial association were the guests of the society at this meeting.

The next meeting of the society will be held at Summerville, the subject being pneumonia.

Adjourned.

BENJAMIN H. COOK, Secretary.

MIAMI COUNTY.

The Miami County Medical Society met in regular session at the Commercial Club September 25. Meeting called to order by President Griswold, with twenty-two members and one visitor present. The new constitution and by-laws were read, and Dr. Carter offered to amend Article 9 of constitution to read, "The society may amend any article of this constitution, at any regular meeting, by a two-thirds vote of its members present, instead of its entire membership." Motion lost. Dr. Yarling moved that constitution as read be adopted. Carried. Dr. Spooner moved that the by-laws as read be adopted. Carried.

Dr. F. B. Wynn, of Indianapolis, talked on the subject, "Diagnosis of Tuberculosis." The subject was very interestingly handled by Dr. Wynn, and was discussed by several of the members.

Dr. J. C. Fretz spoke upon the temperature feature in tuberculosis and recommended that such temperature be taken every three hours for six days to assist in diagnosis.

Dr. John Spooner asked Dr. Wynn if there was any marked difference in percussion sound of both lungs in tuberculosis, and Dr. Wynn said that the right bronchus is more voluminous and shorter, consequently the sound is greater on right side.

Dr. O. U. Carl related circumstance of two patients which he considered lobar pneumonia, who several months later proved to be tuberculous, and asked Dr. Wynn if he thought the disease was tuberculosis from the start. Dr. Wynn said that he believed they had croupous pneumonia from mixed infection, which merged into tuberculosis.

Dr. Lynn reported a case of supposed tuberculosis with hoarseness, who recovered in Albuquerque, New Mexico, and asked "is this the proper climate in which to treat tuberculosis, and how soon should we decide?" Dr. Wynn said that hoarseness is an early and quite positive symptom. It may be late, however. Send away early if at all. You can cure here. Insist upon eggs, oxygen and milk.

Motion made and carried that the invitation of the Commercial Club to attend in a body the laying of corner stone of new Miami County Court House be accepted. Drs. John Spooner, F. B. Carter and J. E. Yarling were appointed committee to arrange for marching. Moved and carried that secretary prepare a list of membership of the society to be placed in the corner stone of the new court house.

Adjourned.

D. C. RIDENOUR, Sec.

SPENCER COUNTY.

The Spencer County Medical Society met in regular session with Drs. Long and Long of Rockport on October 20. Meeting called to order by vice-president. Minutes of previous meeting read and approved. The members who were on the program being absent, the society discussed some interesting cases by individual members. Two applications for membership, those of Drs. Kokomore and Bryant, were received and placed in the hands of the Board of Censors.

Adjourned.

H. Q. WHITE, Sec.

FOURTH COUNCILOR DISTRICT.

The fourth annual meeting of the Fourth District Medical Society was held at Madison, October 22. Meeting was called to order by President Dr. Freeman of Osgood.

The program consisted of sixteen papers, two from each county society. Dr. D. R. Sammers of North Vernon read a paper on "The Business Side of Medicine," which elicited a great deal of discussion, several seeming to realize for the first time that medicine had a "business side."

The association adopted a constitution and by-laws closely modeled after that of the state association, altered to fit local conditions. Owing to the fact that the state association meets in October, the date of the annual meeting was changed to May of each year.

The following officers were elected for the ensuing year: President, Dr. H. H. Sinton, Aurora; vice-president, Dr. Curtis Bland, Greensburg; secretary, Dr. James H. Shields, Seymour; treasurer, Dr. J. H. Green, North Vernon.

The next meeting of the association will be held at Seymour, May, 1909.

At 9 p. m. a banquet was given by the Jefferson County Medical Society at the Hotel Jefferson to the visiting physicians and their wives.

Adjourned.

GEORGE E. DENNY, Sec.

EIGHTH COUNCILOR DISTRICT.

The Eighth District Medical Society held its semi-annual meeting in Anderson on October 22. Seventy-five members and guests registered, and a number of Anderson physicians later arrived and participated in

the festivities, who did not register, making the attendance nearly a hundred.

The meeting was called to order at 10 o'clock by Dr. Granville Reynard, and after the reading of the minutes of the previous meeting Dr. J. B. Garber, chairman of the committee on resolutions, presented the following, which was adopted by the society:

"We, the Committee on Resolutions, appointed at the last meeting of the District Society, held in Portland, Jay County, Ind., April 16, 1908, beg leave to submit the following:

Resolved, 1. That we favor teaching by competent instructors, a thorough knowledge of self and sex to the students in the higher grades of the public schools.

2. The suppression of the advertisements in secular and lay journals and newspapers offering relief for real or imagined sexual conditions or indiscretions.

3. Suitable instructions making quality rather than quantity the standard in family production.

4. We commend the present law which has to do with the prevention of diseases and the compulsory sterilization of the incurably insane, idiots and habitual criminals."

Dr. G. W. H. Kemper of Muncie then presented the following resolutions, which were adopted as read:

"WHEREAS, A combination of the leading medical colleges of our state has been effected on a substantial basis and placed under the management of the Indiana State University, with a bright prospect for a great future; therefore, be it

Resolved, That the physicians of the Eighth District of the Indiana State Medical Association here assembled, hereby express our gratification over the consummation of the work, and that we pledge our hearty co-operation and sympathy for the same, and that we will use all proper efforts to establish and maintain this great state institution; and, be it also

Resolved, That we request our legislators of this district to extend to this valuable branch of education all necessary legislation and financial aid required to make it one of the grand institutions of the whole country."

Following the business session the society was addressed by Dr. William Lowe Bryan, president of Indiana University, on the subject of "Medical Co-operation." The address was one of the finest the society has ever listened to and besides giving an historic review of the development of our art, Dr. Bryan took up and considered a number of the general needs of the profession and the special needs of our state. He particularly pointed out the fact of the great neglect of the human animal while we are seeking for perfection in the development of the lower orders. Great sums of money are expended every year by the government and state in agricultural schools, and the cow, the horse, the sheep and the hog are beneficiaries of the state's munificence.

The medical profession in good part have only themselves to blame; the peculiar selfishness and egoism that has developed in the fraternity has prevented all measures that co-operation alone can secure. The State of Indiana should appropriate a sufficient sum of money to give to the State of Indiana, doctors who are all that could be desired. It should establish a hospital that could at the same time afford proper treatment for the indigent and serve as a training school for those who are to be our successors. It should pay the teachers in the department of science, in art, and in agriculture.

The state should make this medical school one in which the doctors of Indiana could have opportunities for advancement and learning here at home that can now be obtained only at great expense of time and money in a visit to some so-called medical center.

Following Dr. Bryan's address, commendatory speeches were made by Drs. Kemper, Perce, Keller, Green and Schwartz. These speeches considered the advisability of a non-partisan campaign in which the doctors should secure from the senators and representatives expressions as to their attitude in respect to the above needed legislation.

The President was authorized to appoint a committee consisting of one man from each county who would act as a chairman of a committee of three from each county society in an effort to secure for the human animal the rights and benefits that the state is giving the horse, the cow, the sheep and the hog.

An old fashioned chicken dinner, country style, was served at noon by the ladies of the Central Christian church and nearly a hundred doctors and guests sat down to a most excellent repast. After dinner there were seven other papers and addresses. Dr. H. A. Cowing of Muncie, Ind., taking up co-operation in medicine as it would affect the individual to his professional and financial betterment, said many things that ought to sink into the minds of all doctors. He summed up the matter in a nutshell by saying that the quickest way to kill competition is to make your competitor your friend, and that no co-operation would be practical until the doctors stopped that continual and endless knocking of one another.

Dr. J. B. Fattie of Anderson considered the necessity of doctors solving some of the problems in regard to the doctor's own welfare which demand that he study himself as well as his text-books. Many physicians consider it an imposition when they are asked to prepare a paper for their local medical society, and instead of improving their own brain matter by a little original thought and investigation, they waste their time and burden the society with something copied out of a text-book, and many times the text-book is an old edition, already repudiated.

A paper by Dr. Fred M. Ruby of Union City and one by Dr. G. R. Green of Muncie considered the practicability, the availability and the cost of running an automobile. The automobile question being one that is most seriously considered by the average doctor at present and first hand information heretofore has been untrustworthy. Their conclusions were that every doctor ought to buy an automobile, run it until the enthusiasm subsides, then sell it to some other fellow who has the fever, then buy a good horse and buggy and be content.

Dr. J. H. Oliver of Indianapolis told of the country practitioner. A review of the lives of many of our old family doctors would show the community that no other one person has had so great an economic and social value as that grand old man who day and night visited the scattering household and gave of his life and his love as much as he gave them medicine.

Dr. H. R. Alburger of Bloomington, Ind., professor of pathology in Indiana University, spoke of the necessity of more frequent postmortems. When a patient

gets well either the Lord is given credit for it, or it happens in spite of the doctor (so our enemies say). When a patient dies the cause of this death should not be left to guesswork and the physician censured by busy-bodies. The knowledge gained from our post-mortem work has saved the lives of hundreds. The surgeon is a better diagnostician than the average doctor because he had the opportunity of "seeing inside"; he verifies his diagnosis or finds out the true cause of the disease and exploratory surgery in this manner has saved its hundreds more. Dr. Alburger also stated that one reason why few postmortems are held is the fear of the doctor that he will find his diagnosis to have been wrong. The failures, however, will continue unless such evidence of his mistakes can be found and no other means or method can ever be had than that of postmortem work.

Dr. R. E. Brokaw of Portland, Ind., had a paper on "Suggestive Therapeutics," a much neglected subject of vital importance, since it seems desirable and necessary to prove to a patient that his leg is not broken, his kidney not diseased, and death a matter of temporary aberration.

The next meeting will be held in April at Winchester and the successful plan of limiting the papers to discussion of general and economic problems will be continued. An editorial in the Cincinnati *Lancet-Clinic* sends a message which is worth reproducing:

"It is refreshing occasionally to note that some medical societies go out of the beaten track of listening to antiquated nonsense compiled from various sources, and really consider the doctor's welfare. This welfare is augmented by a proper study of his relation to his patients and to the community from the economic standpoint. The Eighth District Medical Society of Indiana is one of these wide-awake organizations which frankly says: We have been neglecting to consider some of the things that go to make our profession a pleasurable one, our pocket-books healthier and our debtors fewer."

M. A. AUSTIN, Sec.

TWELFTH COUNCILOR DISTRICT.

The Twelfth Councilor District Medical Society met in regular session at Fort Wayne, Oct. 27, 1908, with an attendance of approximately 200, the largest in its history. An abundance of material presented for the morning clinic held at St. Joseph Hospital by Drs. Ridlon of Chicago, Allen of Indianapolis and Rosenthal of Fort Wayne. The afternoon session was particularly well attended, and the papers and discussions proved worthy of the attendance. The evening program was a most excellent one and was supplemented by a smoker, at which the district society members were the guests of the Fort Wayne Medical Society.

The following is the program in brief: Morning session, Orthopedic Clinic at St. Joseph Hospital, by Dr. John Ridlon, Chicago; Dr. H. R. Allen, Indianapolis, and Dr. Maurice Rosenthal, Fort Wayne. Afternoon session: Reports by Drs. H. G. Niernman and L. P. Drayer, delegates to the International Congress on Tuberculosis; "Chronic Pericarditis and Cancer of the Heart," with specimen, by Drs. Fred Metts, Ossian, and B. W. Rhamy, Fort Wayne; "Paramyoclo-

nus Multiplex," Dr. E. M. Van Buskirk, Fort Wayne; "Heart Block," Dr. Chas. Beall, Fort Wayne; "Lateral Curvature of the Spine," Dr. John Ridlon Chicago; "Anemia of Pregnancy," Dr. L. P. Drayer, Fort Wayne; "Differences in Anatomy of the Child and the Adult, Predisposing to Disease of the Former," Dr. B. D. Myers, Bloomington, and "Strabismus," Dr. Albert E. Bulson, Jr., Fort Wayne. Evening session: "Infant Feeding," Dr. Joseph Brennemann, Chicago, and "Indications for and the Technic of Vaginal Cesarean Section" (stereopticon), by Dr. Reuben Peterson, Ann Arbor, Mich.

BOOK REVIEWS

WHY WORRY? By George Lincoln Walton, M.D., Consulting Neurologist to the Massachusetts General Hospital. Cloth, pp. 275. J. B. Lippincott Company, Philadelphia and London, 1908.

• An admirable little treatise, well worthy of perusal by physician as well as layman, is here presented. The chapters and references dealing with the subjects of hypochondriasis, neurasthenia and insomnia are particularly apropos and in decided accord with common sense in the broadest acceptance of the term.

DISEASES OF THE EYE. By G. E. de Schweinitz, A.M., M.D., Professor of Ophthalmology in the University of Pennsylvania, and Ophthalmic surgeon to the University Hospital, etc. Fifth edition, thoroughly revised. 895 pages, 313 illustrations. Cloth \$5.00. W. B. Saunders Company, Philadelphia.

Such a well known text-book by such a distinguished author, teacher and clinician certainly needs no extended review notice. This fifth edition has been thoroughly revised and much new matter has been incorporated, which places the work fully abreast of ophthalmological progress. The author has devoted special attention to the methods of examining eyes, and the symptoms, diagnosis and treatment of ocular diseases have received the largest share of attention. As in former editions, a chapter of over one hundred pages is devoted entirely to the various operations performed on the eye, and an appendix fully describes the use of some of the newer instruments of precision, and the method of localizing foreign bodies in the eyeball with the Roentgen rays. Though American and foreign authors of note have been freely quoted, the work bears the indelible stamp of the author in every authoritative statement, and the opinions ex-

pressed are based upon an extended experience and a master's knowledge of the subject.

STATE BOARD QUESTIONS AND ANSWERS. By R. Max Goepp, M.D., Professor of Clinical Medicine at the Philadelphia Polyclinic. Octavo volume of 684 pages. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$4.00 net; Half Morocco, \$5.50 net.

A condensed work of this sort finds a ready place for those who are seeking for a digest of the usual type of state board examinations of to-day. Taken, as it is, from a number of state board examination, with preference given to the larger and more representative states, and utilizing only those of the past few years, the work becomes at once general and strictly modern in its adaptability. The answers are of necessity condensed and brief, and repetition has been avoided to the greatest possible extent, while a commendable effort at classification renders the book even more time saving in its purpose.

ADENOMYOMA OF THE UTERUS. By Thomas S. Cullen, M.B., Associate Professor of Gynecology in Johns Hopkins University. Large octavo of 270 pages, with illustrations by Hermann Becker and August Horn. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

This volume is in keeping with the other published works of the author—a masterpiece of its kind. To his rich gynecologic and gynecopathologic experience the author has carefully added in his book the published results of the work of a selected few, enough to render the work of some service for reference.

The plates and illustrations are most excellent and profuse, and taken with the gross and microscopic findings so vividly drawn, render the volume as satisfactory to the student as to the practitioner. Enough case reports are offered along with the operative and pathologic findings to illustrate clearly the subjects of the text. An interesting description is that offered of a specimen presenting in a single pelvis the following separate conditions: Subperitoneal myoma, adenomyoma, primary adenocarcinoma of the body of the uterus, pyosalpinx and primary adenocarcinoma of the ovary of a totally different type from that occupying the uterus. The text concludes with a summary containing in condensed form the essential facts upon the subject as they are now known.

The paper and type are admirable, the latter large and plain, and spaced where special emphasis is to be placed.

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ORIGINAL ARTICLES

FIRST AID TO THE INJURED.*

I. W. SHORT, M.D.

ELKHART, IND.

Every case of injury or accident is a case by itself, and while we may follow in a general way a set rule, my experience has taught me that we should handle each case separately.

Purpose.—When we find an injured patient at the factory, shops, or by the wayside, we should give immediately such relief as to prevent any chance of further infection, or increase the already existing injury; in fact, we should put our patient in the best possible condition to be moved with the best results, and so prepare him that he may be able to meet any contingency that may await him.

Scope.—If unconscious, watch your patient very carefully; distinguish between drunkenness and a pure injury; if vomiting, gently turn your patient on his side, lower the head to avoid getting any of the matter in the lungs, clear the mouth, nose and throat of any foreign substance; open up any clothing or resistance that interferes with the breathing, usually placing the patient in a reclining position on the back, with the head slightly lower than the body, where the conditions to air and surroundings are the best; guard against any chill, aid the circulation, quiet severe pain, and use every means at hand to prevent shock or collapse; control the hemorrhage; if there are open wounds, immediately dress them with gauze and cotton to prevent further infection; if there is fracture, so place the injured member that it may be moved with the least possible danger.

Instruments.—A good hypodermic syringe with at least three good needles, shears, needles and holder, artery forceps, several tourniquets, or rubber bandages, and an equipment of pocket instruments that one ordinarily carries, a few pliable thin boards or other material that can be easily adapted for splints.

Drugs.—The usual drugs that one would carry in a medicine case, a full line of soluble hypodermic tablets, such as strychnin, morphin, nitroglycerin, atropin and apomorphia. It is always well to have in your case a supply of aromatic spirits of ammonia, digitalis, discs of nitrite of amyl, alcohol, chloroform and ether.

Dressings.—Cotton, gauze, different kinds of bandages, antiseptic powder, spools of adhesive straps, a can of sterile vaseline, catgut, silk, tubes of threaded needles with catgut and silk, and a pair of rubber gloves.

Fractures.—Always put a fractured limb in as nearly normal position as possible and thus avoid causing a simple to become a compound, or mutilating the tissues and increasing the severity of the case if it is a compound. If a compound fracture, cut the clothing away and cover the wound, or if a hole pack it with gauze; in fact, all wounds connected with any fracture should immediately be covered with gauze and cotton. Place over this a shingle or board or anything that will make a splint, well padded with cotton, and bind snugly around the injured member.

If a fractured rib, place a bandage of cloth or adhesive strap snugly around the body, the width of three or four inches.

Fractures of the arm, shoulder joint, collar bone or shoulder blade require, in addition to the above, a sling over the opposite shoulder, to take the weight off the injured member.

In fracture of the skull elevate the head, move your patient carefully, if there are any wounds

* Read before the Elkhart County Medical Society, at the meeting of Nov. 5, 1908.

control the hemorrhage, and get your patient where he can have permanent care immediately.

In fracture of the nose, if the hemorrhage is severe, pack both nares with gauze.

In fracture of the spine keep your patient on his back, as even turning him on his side may prove fatal. Keep him warm, and if necessary resort to artificial heat. Handle this kind of injuries with despatch.

Burns.—Carefully cut away all clothing, and avoid pulling any that adhere. If there is a large burned surface only expose a small area at a time. If the burn is caused from caustic, lye or ammonia, wash the surface freely with water or diluted vinegar. Dress burns with mild antiseptic powder, cover the surface well with sterile vaseline, and cover all with plenty of gauze and cotton, and bandage loosely. Watch for shock, control pain and keep patient warm.

Shock.—Shock and collapse are so nearly alike in many cases that it is hard to have a dividing line, and I will treat both together.

In my experience shock is one of the greatest things to be dreaded in severe railroad accidents, as it is usually more noticable in cases where the tissue organs or bones are badly crushed, while collapse usually occurs spontaneously or from mental or intrinsic causes not connected with physical violence and may follow apparently trivial causes, while both are of a reflex depression. Shock may be of all degrees from the most temporary faintness which will leave in a few minutes to a condition of vital depression which terminates fatally without any reaction.

Symptoms.—These at least can be referred almost solely to vasomotor paralysis of a reflex origin from the peripheral nerves. The face becomes pale, there is pallor of the skin and visible mucous membrane, coldness of the body, dilated pupils reacting slowly to light, heart irregular with a weak, thready or imperceptible pulse, respiration irregular, breathing shallow and hard, mental inactivity, subnormal temperature, nausea and vomiting. Again, the shock may be of such a type as to cause the patient to be restless and excitable and even uncontrollable, with irregular pulse and breathing.

We have another type, which is called delayed shock, in which the symptoms are practically the same and come on some hours after the injury, and may be due to concealed internal hemorrhage. If the shock becomes more pronounced we have coma, the surface becomes cold and covered with perspiration, and death usually follows quickly. These symptoms are often noted in injuries to the head or severe injury to the viscera, or gunshot wounds.

Often in the first aid we can in many cases prevent shock or alleviate it and avoid collapse. At the very outset one must go cautiously, as there are several things that can not safely be neglected. It is not well to establish reaction too quickly, as over-action might be followed by secondary hemorrhage. Often patients are unable to swallow, and it is a poor rule to give a patient suffering from shock strong liquors, as it might bring on coughing and that in itself prove fatal. The same is true of inhaling such strong stimulants, as ammonia.

The patient should be laid flat on the back, or even with the head lower than the body, or the extremities should be raised. In severe cases it is a good plan to bandage extremities from the tips to the body. Warm stimulating drinks if they are available are good. Aromatic spirits of ammonia well diluted may be given. Keep the patient well covered. Often artificial respiration or rubbing may be resorted to, and nitrite of amyl will often help to equalize the circulation.

The principal remedies with which to stimulate the activity of the heart are strychnia and tincture of digitalis in good-sized doses hypodermically. Nitroglycerin should be given with caution. The respiration may be helped by giving atropin, and if the patient is extremely restless give hypodermic injections of morphin.

Often in severe shock or loss of blood, or where the limbs are badly mangled, a prompt amputation of the mutilated part is important, as it will often bring about an improvement. It is a question in my mind whether whiskey should be given at all. If it is given it should be well diluted or given hypodermically.

Hemorrhage.—Hemorrhage of the brain is better controlled by keeping the patient in a sitting position or with the head elevated.

In hemorrhage of the limbs cut away enough clothing to expose the wound, use tourniquet or rubber bandage or ordinary roller bandage above the wound. Never touch the wound except when absolutely necessary. If the flow of blood is severe, place a pad or roller bandage over the artery and bring enough pressure to bear to check it. After a few minutes, if the hemorrhage ceases, loosen up the pressure and only maintain pressure enough to control it. Elevating the limb will often help to control hemorrhage. A string or rope is not a good thing to use in controlling hemorrhage, and too long continued high pressure will often interfere with the recovery of the patient, as it will likely cause sloughing and tend toward gangrene. If unable to check the flow of blood it may become necessary to pick up the artery and tie it, or in rare

cases where this is impracticable, by taking a long curved needle with catgut or silk and going into the wound where the hemorrhage is severe, picking up the tissue and tying temporarily, the hemorrhage may be checked. In many cases packing the wound well with gauze will suffice.

In hemorrhage from the armpit, where the arm is mangled or torn away and you are unable to find the artery, any hard substance, such as a roller bandage or paper, covered well with gauze, may be pressed into the wound and bandaged tightly, or a hard substance may be placed in the artery back of the collar bone and the artery pressed down on the first rib.

Internal Hemorrhage.—Move the patient gently and as little as possible. If the hemorrhage is from the skull have the head elevated, otherwise the patient should be in a recumbent position on the back, with the head slightly lower than the body. Hemorrhage from the skull often can be controlled or checked by using hard pads of gauze and compressing tightly with bandages. In hemorrhage from the lungs or bowels apply cold wet cloths or ice packs externally, give morphin hypodermically, and if the pulse is weak give strychnin and digitalis.

Bullet Wounds.—Gunshot wounds as a rule are dangerous. Usually we have very little hemorrhage, though at first there may be a free gush of blood, then the arteries recede and the hemorrhage will cease. It is well to pack the wound with gauze, covering the surrounding tissue with gauze and cotton. If the hemorrhage is severe treat it as ordinary hemorrhage. If the bone is fractured use the same precaution as in other fractures.

In gunshot wounds we should be on the lookout for shock, which follows very rapidly in nearly every case, especially if the viscera or brain is injured.

Suspected Internal Injuries.—If your patient is in severe pain give morphin hypodermically. Tone up the heart if necessary and watch the respiration. Keep the patient warm; if necessary resort to artificial heat, and get him to the hospital or his home as quickly as possible, where you can give him permanent relief.

SUMMARY.

A noted surgical writer has well said that the fate of an injured person depends very largely upon the acts of the surgeon in whose hands the injured person first falls; therefore, the necessity and value of prompt and efficient first aid needs no comment. Do not handle the patient or wounds any more than is absolutely necessary. Dress all wounds as nearly as possible antiseptically,

using plenty of gauze and cotton. Fix all fractures in a normal position and in such shape that they can be moved with safety. Avoid shock and guard the respiration and circulation. Move the patient gently and carefully. Never touch the wound with unclean hands, and if there is dirt in the wound you will have less trouble from it by covering the wound with gauze and leaving it until you have a chance to give it careful and permanent attention. Keep the patient warm and avoid a chill. Be guarded in your diagnosis and prognosis, because sometimes apparently mild injuries prove fatal in a few moments, while many cases badly mangled and apparently fatally injured will recover. And, finally, the most essential thing to remember is to use good common sense and good judgment in each and every case.

CYSTITIS IN THE FEMALE.

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Perhaps no other organ in the mechanism of the human body is more abused and less nursed than is the female bladder. From its structure, its function and its relation to other structures this organ is first of all predisposed to disease. On the other hand, it appears to possess a certain immunity which renders it less often the seat of disease than we would expect. It is possible that from its own nature the bladder is tolerant of great injustice and so well able to recover or ward off infection and disease that we have until recently heard less of its diseases than of those of other organs whose treatment falls into the field of the gynecologist or surgeon.

It is not that these conditions are new, but that there is and has been for a time a tendency to regard lightly diseases of this organ in our eagerness to relieve by treatment of the generative organs. Winckel points out in his "Diseases of the Female Bladder and Urethra" that much that is now known of the diseases of these organs was known thousands of years ago and, having been forgotten, was rediscovered by late observers. Aëtius (502-575 A. D.) described ulcerative affections of the bladder, and Paul of Aegina (670 A. D.) treated diseases of the bladder by means of injections through a catheter. In the nineteenth century Simon devised a series of conical specula with obturators by which the urethra could be dilated to an extreme degree, and from that time rapid strides in the examination and

treatment of the bladder have been made. The awakening of our own surgeons to the importance and simplicity of this line of work is due very largely to Howard Kelly, whose contributions to this department of the diseases of women rank with the most important of the past century.

True, we are all quick enough to recognize the symptoms of a diseased bladder when they are manifest, but how few of us stop to consider the numerous forces against which the bladder in the female must constantly guard. Cystitis implies an infection, the entrance of bacteria into the bladder, and their subsequent growth and development there. The principal object of this paper shall be to point out the factors which predispose to this infection. Among these we find, doubtless, the most important to be congestion. Both anatomically and physiologically the bladder in the female is prone to become congested. Among the anatomical factors are:

1. *Position*.—This varies with its contents and the relation to other structures. In the healthy state the empty female bladder lies in the median line behind the pubes and in front of the vagina, covered immediately over its fundus by the peritoneum, while the anterior wall for a part of its distance is devoid of a peritoneal covering. In the empty state the transverse diameter of the organ greatly exceeds the antero-posterior diameter, the antero-posterior walls being directly adjacent, while the transverse walls are widely separated. When the organ is distended it inclines slightly to the right side, and the fundus may reach the level of the umbilicus.

2. *Size*.—The average capacity of the female bladder is four hundred grams, somewhat less than that of the male bladder. Its minimum capacity is twenty to thirty grams, while the maximum is 3,320 grams (Fritsch).

3. *Structure*.—In the immediate structure of the organ we find the principal predisposition to congestion in the richness of its blood supply, which is derived from the vesiculous superior and inferior branches of the arteria hypogastrica. The branches of these vessels form a thick capillary network which can be seen just beneath the superficial epithelium of the mucous membrane. The vertex is not so thickly supplied as the deeper parts.

4. *Relation to Surrounding Organs*.—This brings us into a field of importance as well as of neglect. It is so easy to overlook some pelvic condition only to realize its importance after the bladder has been long congested and is thoroughly infected. Among these factors are the following:

(a) *Urethra*: The most frequent channel of entrance of bacteria into the bladder. Its length, its direction and dilatability make it also the channel for the introduction of foreign bodies into the bladder. It is pre-eminently the organ from which an infection may by direct extension reach the bladder, while its direct relation with the vulva and its indirect relation with the vagina, uterus and anal region render it especially liable to be involved when the supporting parts are the seat of infection.

(b) The ureters by their constant drainage of urine, which may carry infection to the bladder, form a frequent predisposing agency to infection of the bladder.

(c) *Peritoneal cavity*: A general visceroperitonitis in many cases results in pressure on the bladder with attendant hyperemia. In addition to this, complete filling of the bladder may, from the same cause, be prevented. Relative to the peritoneal cavity, gravity must form a factor of more or less importance, as all free fluid gravitates to the lower abdomen, with consequent pressure upon the bladder, as in ascites, peritonitis, hemothorax, etc. General or local peritonitis may result in involvement of the bladder by direct extension. Abdominal tumors must not be lost sight of in considering bladder symptoms.

(d) In the non-pregnant state, a perfectly healthy uterus becomes enlarged and congested at the menstrual period, producing congestion of the bladder. Among the diseased conditions we must consider endometritis, fibroma, polypi, sarcoma or carcinoma. Any malposition of the uterus is capable of producing an irritable bladder by mechanical means; e. g., in ante flexion the uterus is above and around the bladder, the fundus and anterior wall often pressing directly upon the bladder. In retroflexion the body of the uterus, by being tipped backward, results in pressure upon the bladder by the cervix. A general prolapsus produces pressure upon the bladder, with resultant congestion.

(e) The vagina and perineum are concerned more especially in cases that have suffered lacerations and as a result produce a cystocele of greater or less degree, which is not only a very prolific cause in the production of cystitis, but a great hindrance in its cure, because of the accompanying difficulty or impossibility of completely emptying the bladder.

(f) *Tubes and Ovaries*: Any disease or enlargement of these organs will result in more or less pressure upon the bladder, and they are certainly a rich field for the process of extension of a localized infection through adhesions. A colon bacillus infection may easily pass into the bladder

from the rectum, intestines or appendix in cases in which they become adherent to the bladder wall.

In the pregnant state there are two distinct periods in which the bladder must bear the brunt of pressure effects. These are during the first three months of pregnancy, when the growing uterus still occupies the pelvic cavity, and during the last few weeks of pregnancy, when the gravid uterus settles by its own weight into the pelvis. Hence the irritation of the bladder in the early months of pregnancy and its return in the last few weeks. In labor and the puerperium we have two distinct factors introduced—the first, the traumatism during the passage of the fetus through the birth canal, and the second, the use of the catheter.

The period which confines the patient to bed and requires more or less catheterization is the period from which a great majority of patients date the first attack of cystitis. Careful as one may be, the introduction of the catheter at this time into a bladder rendered sensitive by traumatism is responsible for a great majority of cases of cystitis. Many a patient comes to the physician for examination, thinking she has been lacerated at labor or has falling of the womb, and, much to the disgrace of the profession, she is often tamponed for a period of time, when in reality the trouble is a cystitis dating from this period of catheterization. Such cases following surgical operations are by no means unknown.

From a physiological standpoint we have two important factors predisposing to congestion and disease; first, the bladder at all times contains urine which may in itself carry infection from the kidneys or ureters or it may be decomposed within the bladder, rendering it unhealthy; secondly, the peristaltic movements of the ureters and bladder keep it in constant motion and render healing of the surface slower and in some cases impossible without artificial drainage.

To the factor of congestion as a predisposing agent in cystitis we must add (2) retention of urine, which may be acute or chronic, resulting in overdistension or decomposition; (3) abnormal urine, as from elimination of drugs, toxins, etc.; (4) foreign bodies, and (5) neoplasms.

The pathogenic organisms which are the direct cause of cystitis are summarized by Ashton in order of their frequency: colon bacillus, gonococcus, staphylococcus pyogenes, streptococcus pyogenes, proteus vulgaris, tubercle bacillus, typhoid bacillus, mixed infection. These organisms may be present in the bladder without affecting the mucosa so long as its resistance is not

lowered, but will become active upon the development of congestion. An exception must be made to this statement in the cases of the gonococcus and the tubercle bacillus which it is now believed are capable of attacking a perfectly healthy bladder mucosa.

The symptoms of cystitis have for a long time been held by the profession as so marked and classic as to offer little doubt as to the diagnosis. Many times has this self-confidence resulted in painful and dangerous irrigations of the bladder when in reality there is a stone or an infection or both in the pelvis of the kidney, to say nothing of the gynecological diseases that are thus overlooked.

The onset of the disease may be sudden or very gradual even when the same organism is responsible for the infection. In well-developed cases of cystitis the cardinal symptoms are: (1) Frequency of micturition (and there is no cystitis without it). This varies in degree from a few minutes to an hour or so, and may result in constant tenesmus. It is always accompanied by the more unpleasant condition of having to empty the bladder on the first impulse. It is the first symptom to appear and the last to subside. (2) Pain, not always present at first, develops some time during the disease. It follows micturition at first and later becomes more nearly constant. The pain is sharp, cutting, bearing down in character and when the bladder alone is involved does not radiate. (3) Bleeding may or may not follow micturition. (4) Pus, which is present in all true cases of cystitis, has so many sources that it may be confusing, as from the urethra, ureters, kidney or bladder. However, its presence in conjunction with the above symptoms points to cystitis.

The general symptoms in the acute state, as fever, rapid pulse, dull headache, loss of appetite, nausea and constipation, pass away with the acute state, and their persistence in chronic cases should always suggest something more serious, as retention of urine, tuberculosis, pyelitis, etc.

Diagnosis.—The presence of a milky urine passed frequently and with pain should always suggest to the practitioner the existence of a cystitis, and in a majority of cases the treatment will prove this suggestion correct. It is only the rarer cases which need further investigation to complete a diagnosis. No one is justified in treating for any length of time an acute cystitis without signs of improvement and neglect this investigation in the first step, which is the urine examination. In going about this procedure, if it is to be of real value in diagnosis, the patient should

not be allowed to void the urine, but, after the parts are thoroughly cleansed it should be removed by a sterile catheter, thus lessening the danger of mistaking an admixture of leucorrheal discharge for pus and the smegma bacillus for the tubercle bacillus. This precaution will often obviate worry for the patient and the embarrassment of having the patient get well after one has given her a grave prognosis. If the microscope reveals pus in the catheterized specimen there is a possibility that it comes from the kidney. The settlement of this question depends upon the second step—that of direct examination of the bladder, which consists of: inspection of the urethra, inspection of the vagina and perineum for cystocele, tear or congenital deformity, palpation, external, combined or internal should be carried out. External palpation is made through the abdominal wall above the symphysis, bimanual or combined with one hand above the symphysis and the other in the vagina. The latter will determine the existence of cystocele, the consistence of the bladder wall, the presence or absence of a tumor, calculus and, in most cases, of adhesions. The bladder may be explored with a sound introduced through the urethra, and finally the interior may be palpated directly by introducing the finger through the dilated urethra. The final diagnosis, however, in cases of persistent cystitis is made by direct inspection of the interior of the bladder wall. This is a process which falls distinctly under the head of surgical operations and should be carried out with the same precautions. Instruments, accessories and field of operation should be rendered aseptic and kept so. A local or general anesthetic may be given, dependent upon the severity of the symptoms and the sensitiveness of the patient. A 4 per cent. solution of cocaine on cotton packed into the urethra will suffice in most cases. The patient may be placed in any one of three positions, the dorsal position with hips elevated by pillows, the knee chest position as advocated by Kelly, or the exaggerated Trendelenburg position as recommended by Webster. All of these positions depend for their practicability upon the expansion of the lumen of the bladder by air. When the anesthesia is complete the urethra must be dilated for the insertion of the speculum. This is accomplished by means of some one of the many round solid urethral dilators, as Hegar's dilators in serial sizes. Any dilator working on the principle of all the forceps is bad enough for the dilatation of the uterine cervix and certainly has no place in operations on the urethra. When the urethra is stretched to the extent of about 12 mm. in diameter a round

urethral speculum with cone in place is inserted, the cone withdrawn and the speculum left in place. Any residual urine is to be removed by one of the many instruments of suction made for this purpose.

The interior of the bladder is then inspected directly by the aid of light reflected through the speculum by a head mirror from an electric bulb in the hands of an assistant, or perhaps better with a light on a band on the head of the operator. By moving the speculum about, the whole bladder mucosa can be inspected and the diseased areas made out. The beginner with the cystoscope should disabuse his mind of the opinion, current until recent years, that the whole bladder mucosa is affected in cystitis, as the investigation of recent years proves that this is the exception rather than the rule. The picture gained by the speculum varies with the nature and severity of the infection and the stage of the disease. In acute cases most often the trigone is affected, but the inflammation may localize in any part of the mucosa. The white areas become in color a pale red to a bloody red, the mucosa is swollen and the blood vessels, which in the healthy state are plainly visible, now are seen faintly or may become entirely invisible. Mucus is exuded from the surface. Many cases show an exudate of pus, and there may be central sloughing of the infected area. In cases of tuberculosis the areas are small, nodular, ragged and harsh in appearance with a nodular or a sloughing center from which the inflammation extends, gradually shading off into the healthy tissue. Such areas may be single or multiple.

In the absence of these findings the persistence of the symptoms with pus in the urine would indicate that the trouble lies in the kidney. If there is a history of long standing trouble the chances of tuberculosis of the kidney are great. At any rate under these circumstances one is justified in resorting to catheterization of the ureters to locate the true seat of infection. While yet in its experimental stage no one is justified in making a positive diagnosis in cases of long standing without resorting to the tuberculin test (by eutaneous application, not ocular), which is at least to be commended both from its simplicity and its harmlessness.

Differential Diagnosis.—The most common affections one is called upon to differentiate from cystitis are: neurosis of bladder, contraction of bladder, pelvic tumors or other abnormal condition in pelvic organs, infection of ureters and kidneys, vesico-urethral fistula and stone or foreign body in bladder.

Treatment. Prophylaxis.—As noted in the beginning of this article, the most potent factor in producing cystitis is congestion; therefore in preventing cystitis one should look to the relief of the cause of congestion. This is often due to some gynecological trouble. This trouble should always be remedied by operation when necessary. Great care should be used at times when catheterization is necessary. The catheter should be avoided when possible, and when finally resorted to the process should be considered in the light of a minor surgical operation and performed with the same aseptic precautions. A well regulated life, good food, abundance of water and the abstinence from alcoholic excesses all contribute to the prevention of disease of the bladder.

Active Treatment.—This varies with the stage of the disease. In acute cases rest is the essential factor in contributing to recovery. The patient should during the first few days be put to bed and absolute rest insisted upon, the patient not rising to empty the bowels or bladder. It is in this stage that internal medication is of value. Urotropin is perhaps the drug that can best be relied upon to benefit more cases of bladder irritation than any other. It should be given in capsules in doses of seven to ten grains about four times a day. Other drugs that are of value are santalwood oil, methylene blue, copaiba and salol; along with these a milk diet and an abundance of water should be given.

When the acute symptoms have begun to subside, and it is not wise to do it earlier, we may resort to irrigation, the patient remaining in bed and the irrigation given through a two-way catheter. Among the many solutions used the following will be found most useful: Sterile salt solution, boric acid (sat. sol.), permanganate of potash 1-5000 to 1-1000, silver nitrate 1-5000 to 1-1000 or even stronger. When these solutions are employed they should be used at least twice daily and the bladder allowed to retain part of the solution for a short time, then upon its being voided the writer has found it valuable to introduce into the bladder an oily preparation, this to be retained. For this purpose I have employed with excellent results liquid alboline with twenty grains of bismuth sub-nitrate to the ounce. Liquid vaselin or boroglycerin may be used for the same purpose and in the same way. In cases where there is constant tenesmus which fails to yield to irrigations it is possible to give rest to the bladder only by artificial drainage. This is best done by making an opening through the anterior vaginal wall into the lumen of the bladder. The bladder is then irrigated, the fluid being

introduced through the urethra and escaping through the vesicovaginal fistula. Upon recovery of the bladder the fistula can easily be closed by suturing through the vagina.

In tuberculous cases, or in cases of other origin, which become chronic, topical treatment must be resorted to. This consists of inserting a speculum into the urethra and by means of a swab applying to the ulcerated surface a preparation of silver nitrate pure or the tincture of iodine. This procedure should be repeated about every third day. If, after this, healing is not in progress, it becomes imperative to cut down upon the bladder, remove the ulcerated area and close up the opening thus made in the bladder.

Tuberculin in the treatment of tuberculosis of the bladder deserves mention and a trial.

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MYOCARDIAL FAILURE FROM CAUSES OTHER THAN VALVE LESIONS.*

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In this brief paper it is not my purpose to treat exhaustively on the subject of myocardial failure, nor have I attempted to follow the definite rules of classification usually found in textbooks, but shall only bring out some of the more common and a few of the misleading points connected with this disorder. In the past few years medical science has made such marked and practical advance in the recognition and management of all infectious diseases that we, with some degree of pride, point to our ability to handle this class in their acute form; but to certain changes induced by this class of diseases in some of the organs or tissues, especially the vascular system, we still plead a degree of ignorance and admit our helplessness to control. How frequently does chronic toxemia, especially that resulting from intestinal indigestion or faulty tissue metabolism, so insidiously but surely exert an injurious effect on the peripheral capillary circulation, raising in a chronic state the intracardiac pressure, or again chronic conditions of whatever origin may cause degenerative changes in the walls of the large blood vessels, particularly the coronaries or of the aorta at their origin, occluding the mouths of these vessels, and myocardial failure results. In one instance from overwork of the heart muscle itself, or, what is more frequent, from faulty nutrition, resulting from degenerative changes in

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the arteries supplying nourishment to the heart muscle. Of this last condition I might suggest that of the infectious diseases syphilis and typhoid are by far the most common.

It is well to bear in mind that often because of the frequent negative physical findings about the heart and the nature of the clinical symptoms pointing to some remote organ, as the kidneys, stomach or nerves, as the primary seat of the disease, the diagnosis is most difficult. It is appalling that in so many patients in middle adult life, only after irreparable damage has been done to the myocardium, is the real nature or tendency of their disorder recognized or fully appreciated. Who in medicine would not advise certain restrictions in the habits and occupations of a young man with valvular endocardial disease? Why? Because the conditions are so plain and there is present the bugaboo murmur so needlessly alarming to the man who knows from statistics and his own personal knowledge that if the condition be not safeguarded there will follow myocardial degeneration, invalidism and premature death. Yet how little different the ultimate effect of the chronic toxic condition of whatever nature, especially when associated with habits of work causing hypertension, inducing vascular and myocardial degeneration—a condition which, after compensation is once broken, is, as a rule, less amenable to treatment than myocardial failure resulting from valve lesions. To be sure, valvular insufficiency is frequently met with in this class of patients, but only as the result and not as the cause of the myocardial condition, and when present is frequently accompanied by a murmur, which, occurring as they do in the latter stages, taxes the diagnostician to his utmost to directly separate cause from effect. The human organism recognizes no difference in the insult of an overload of toxin contained in the alcohol consumed by the drunkard and that constantly filling the system of a tense and strenuous business man who, by his constant mental effort, so disturbs his metabolism that a normal chemistry is most impossible, which condition is often made all the more damaging by the habit of irregular and rapid eating. Unconsciously this man is constantly saturating his system with toxic substances of imperfect digestion or metabolism. Both in reality are nothing more than dissipation, and the evil effects of the latter are just as certain and even more disastrous than the former. Age and heredity, to be sure, are the common causes of degenerative changes in all the tissues, especially that of the heart and arteries. Yet why the increase of myocardial degeneration

in those comparatively young, without specific etiological history, and why should they come to us in such increasing numbers branded as incurable cardiopaths? The frequency with which we overlook a supposedly unimportant early etiology of such a condition is second only to our failure in many cases to interpret correctly the symptomatology. The age of 40 was immortalized by Osler as the deadline of a perfect physical human organism. Yet how often do we see men even at an earlier age who, after physical effort causing a strain of the myocardium which under normal condition should quickly disappear, show a heart which remains in a state of dilatation with tachycardia, often arrhythmia, fatigue, dyspnea or slight edema—all symptoms and signs of myocardial failure. How often a mild pneumonia or some simple infection is followed by this same condition! Could such happen to a healthy heart muscle? Possibly, but very unlikely, and a careful examination into the history will, in many, develop in the family a marked tendency to premature tissue degeneration. In such a case a careful physical examination only confirms the history by finding a heart enlarged, most often to the left, but sometimes to the right, which by change of position or after exercise will show a soft systolic murmur but little transmitted from its point of origin. In many of these subjects the arteries are recognized as being quite superficially placed, full and round, not tense, but often with thick leathery walls. All these things combine to show conclusively that the physical effort or slight infection only precipitated the crisis and the real mischief had been going on in the vascular system for many years. This identical case may, owing to change in the blood supply due to want of proper propelling force of the heart, or impermeability of the arteries of the nervous system, manifest, first, marked change of temperament or, what is so frequently complained of, a chronic form of muscular fatigue, or the accompanying renal symptoms may direct attention to the kidneys. Another of this class of patients we so frequently encounter is the man of middle life of active business habits, who previously, so far as we know, was in good health, who is suddenly seized with some acute infectious disease, particularly influenza, which is only of moderate severity, generally of the so-called catarrhal or bronchial type. Our treatment is only routine. The acute condition subsides and we dismiss him as cured. The cough continues. Muscular fatigue is complained of and sleeplessness appears. The convalescence is not prompt or complete and the patient does not recover suf-

ficiently for him to do his ordinary work. He will be found flinching business responsibilities, becomes irritable with himself and all those about him, experiences a mental lethargy, appetite and digestion may be normal, rarely is there loss of weight, although in some cases this is quite extreme and is the first and only evidence of myocardial mischief. Color remains fairly good, but the vasomotor tone is unstable. Skin is relaxed and he perspires freely on making the slightest mental or physical effort. Examination shows still some moisture throughout the lung, but not enough to explain all the symptoms, and after a siege of symptomatic treatment and disappointment we begin in earnest to eliminate various possibilities. The constantly changing symptomatology encourages us to search for a common cause. By careful study the pulse rate, when at rest, is found nearly normal but easily excited and not of the best quality. The wave may be full but is not sustained. The tests of the functional capacity of the heart muscle show it to be decidedly wanting in strength or reserve power. The apical impact is feeble and scattered, often displaced inward from the left border of the cardiac dulness, which area is markedly quadrangular in outline. It is evident that you will have compiled sufficient proof to leave no doubt of a diseased myocardium and make plain the line of treatment.

Another type of myocardial patient met with is the man more advanced in years, yet not old, of thoroughly temperate habits except the work incident to the making and management of a successful business, who gives no definite etiological history, who on retiring at night notices on first lying down a little fluttering about the precordium or epigastrium, a mere consciousness of his heart action, lasting an instant—not long enough to cause any discomfort, but long enough to make a decided impression on the mind of the patient. This may not be repeated in months or for a year, but it undoubtedly marks the beginning of mischief, and sooner or later is repeated, possibly a time or two in the same evening or more frequently the patient is awakened from sound sleep by this sensation. Then comes the sense of dyspnea when the patient is making no physical exertion, for which the stomach is often blamed. The consciousness of the want of breath in this early stage is not usually accompanied by an increased breath rate so common in the dyspnea or effort. The latter may be present in some cases or come in the terminal stage of others, but it is entirely absent in many. A past polyuria is not uncommonly associated with the

early history of this condition. There is some anemia and an indisposition to take physical exercise. Such a patient omits his pleasures, finding them only in his office at work, which he now feels needs all his energy. This he is content to do and no more. In habit and often in appearance he has aged rapidly. His family insists he is not well, but he refuses medical attention.

These individuals, owing to the variability of the physical signs, fall easily into two classes. First, the slight built man of active habits and poor muscular development will, on examination, be found with a distinct and apparently strong apical impact, an area of cardiac dulness more apparently increased than real, with a high-pitched, rather abrupt short first sound. The aortic second sound also is accentuated and heard over the whole of the precordium. The rate of the heart's action may be rapid, but often slow, frequently very slow when the patient is at rest, but easily excited by exercise. This slow pulse rate, I might add, in this class of patients is pretty positive evidence, when direct toxic or reflex factors are eliminated, of fibrotic changes going on in the muscular walls involving some part of the auriculo-ventricular bundle of fibers. Arrhythmia may be present, which naturally means involvement of the auricular walls, usually demonstrated by finding an increase in the transverse area of dulness in the third interspaces. In these subjects the systemic arteries appear very large and round and are easily felt, sometimes quite visible, giving the impression of being extremely sclerotic, which a careful examination will prove not to be true, but appears so owing to their fullness and superficial location. The heart findings may prove misleading, as the accentuation of the aortic valve closure is in part because of their nearness to and thinness of the chest wall, or because of the moderate dilatation of the first part of the aorta. The first sound apparently so strong is not so at all, but is only high pitched and entirely without duration or muscular quality. This characteristic sound is especially significant of myocardial degeneration.

The other class is represented by the full-blooded plethoric man, greatly over weight, especially large in the abdomen, phlegmatic in temperament and usually of sedentary habits with no anemia, few or no nerve symptoms, a urine variable in amount but more likely to show at times albumen and casts. Blood pressure is practically always very high, continuing late in the disease, even when compensation is badly broken. Cough and dyspnea are quite prominent and appear early. This in part explains why this class

of patient is so often mistaken in the early stages as suffering from pulmonary disorders. Nervous symptoms are conspicuously absent as compared with the previous class. Physical examination shows the lungs, in many instances, to be more or less emphysematous. This condition, together with the abundance of subcutaneous fat, makes the physical findings about the heart very uncertain. No apical impact can be either seen or felt except occasionally with the patient lying on his left side, when it will be located, as a rule, much higher than normal. This is one of the misleading signs. While the area of cardiac dulness in these cases is mostly impossible to outline, palpation or auscultatory percussion generally shows a greatly increased area of deep dulness. On auscultation, as may be expected, the sounds are feeble and distant, but have distinct diagnostic characteristics. The first sound is low pitched, often with a prolonged and marked murmurish quality, heard, as a rule, best between the nipple and ensiform cartilage. At times a more distinct vibratory sound ending in a sort of a whet may be heard. Reduplications of the heart sound are not only frequent in this class but are often present as a very early symptom. Murmurs are much more common in these subjects than generally supposed and have a few distinct characteristics. They are always systolic unless complicated by relative aortic insufficiency. They seldom have any distinct direction of transmission, and as pericardial murmurs they rarely leave the precordial area. In the routine method of examination murmurs are absent by superficial examination in a majority of cases, but can be developed in nearly all by a moderate amount of physical exercise, after which the patient should immediately lie flat on his back. By this means a murmur will be heard most often in the aortic area in a great majority of cases and any murmur previously present will be much intensified. The aortic second sound is always accentuated if the valve cusps themselves are free from disease, in deciding which the quality of sound from the aortic closure should be carefully noted in every case. While this sound is accentuated, it is seldom so heard at the apex as in the first class. Both the arteries and pulse wave are quite small, arousing little suspicion of the high tension so constantly present. While blood pressure in subjects of myocardial failure of non-valvular origin is in the vast majority greatly increased, yet in those cases due to aortic disease or resulting from acute infection the myocardium may fail very early with reduced size of the impulse, or simple dilation and the blood pressure will be found

even below the normal. The heart rate, as a rule, is rapid and regular until the terminal stage or until its auricles are involved, although arrhythmia is present in some as an early symptom.

Gravity edema is strikingly absent in both classes, being never present in the first and but slight in the lungs and liver of the last. In this last class of patients, while edema is rare, a recognizable cyanosis is often seen, sometimes only in the lips, and may be noticeable for many months or even years before the final breakdown, in all cases presenting clinical symptoms which make the diagnosis doubtful. This sign should be carefully watched for, as it may be very slight, but certainly of value. Pain in either class of patients is exceedingly rare, considering the very great number, but when present and of a true anginoid character must be regarded as unmistakable evidence of disease involving the coronary vessels. But this symptom is always of interest to a diagnostician owing to the frequency with which it will be found as a result of other conditions. Of the nervous symptoms which so frequently in the beginning dominate the clinical pictures in myocardial subjects, making the diagnosis so difficult, I will add that a heart which responds promptly and uniformly to all mental and physical efforts is more safely diagnosed as one of pending myocardial failure. In obese subjects an irritable heart may be present without physical signs for many years before the myocardial failure becomes apparent. The bacterial toxins, especially of influenza and other infections, often primarily irritate only the nerve or their centers; yet we constantly find both acting directly on the cardio-vascular tissues, the first acutely on the heart muscle, while the second is a common cause of arterial and myocardial degeneration. In regard to some stimulants, especially tobacco, the excessive use of which so often masks the diagnosis of beginning myocardial failure, while frequently a cause of irritable heart, it is well to bear in mind that an already weakened heart is much more susceptible to the effects of tobacco than is one in perfect health. While many of the nervous manifestations may come from myocardial failure, it is well not to forget that a part of such symptoms may be the result of an organic disease associated with the myocardial failure and not as a result. In suspected heart cases, with marked nervous manifestations, we should study more carefully for pulmonary or hepatic engorgement as well as observe carefully the quality of the first heart sound, the character of the pulse wave, the condition of the arterial wall and study repeatedly

the urine and test most thoroughly the functional capacity of the heart muscle and not attempt to make a diagnosis of myocardial disease by the use of the stethoscope alone.

SUMMARY.

1. Of all causes of non-valvular myocardial failures, diseased coronaries are the most common cause.

2. Heredity is a most active factor, often being in marked evidence in two or three generations.

3. In many instances the early symptoms of myocardial failure manifest themselves in some part of the nervous system, the kidneys or the stomach, and thereby lead the diagnostician far from the seat of the primary trouble.

4. Chronic infection or toxemia of any character forms the beginning in most chronic cases.

5. The overstimulation of the nervous energies operate first by maintaining an increased vascular tension, and, secondly, by exhaustion, making the individual more susceptible to toxic influences.

6. Hypertension, accompanied by overdistension of the arteries, is most active in causing arterial degeneration and myocardial failure.

7. Hypertension, associated with a chronic toxic condition, predisposes strongly to arterial degeneration and myocardial failure.

8. Myocardial failure from causes other than valve lesions is much more serious, uncertain and difficult to restore, and may approach a stage of complete failure without pain, edema or the least evidence of renal involvement.

10. A tense and strenuous business life is nothing but dissipation, and among Americans is not only directly responsible for more domestic unhappiness, but a more potent cause of primary myocardial failure than any other excess.

A FEW IMPORTANT POINTS IN REGARD TO NERVOUS AND MENTAL DISEASES.*

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While the principles of medicine in general are making noticeable advancement and progress, particularly in regard to the prevention of disease, and in the attempts being made to determine and devise means by which to enable Nature to combat and overcome pathological conditions, there is one branch that does not seem to be keeping apace, viz.: that part dealing with diseases of the nervous system, inclusive of the mental condition. In other departments of medi-

cine it will be found that various measures which have for their object the elimination of those factors acting as causative agents in the production of diseased conditions are being continuously instituted and carried out. As a result we find that the ravages of many of the more virulent diseases are not only being lessened, but are becoming to some extent eliminated, viz.: small-pox, yellow fever, malaria, tuberculosis, etc. It is unnecessary to go into detail to point out wherein the ravages of these diseases have lessened, and to a certain degree been eliminated, or to indicate the various means and methods utilized to bring about such results. Attention need only be directed to the interest that is being taken in one of them, namely, tuberculosis, to show what is being done. It is a condition engaging the vital attention not only of the patients affected, of the physician in charge, and of the immediate family, but also that of the surrounding community, of the local authorities, and of those in charge of federal and even international affairs. It is difficult to form even a relative estimate of the time, energy and money that is being spent in the endeavor to lessen and stamp out the ravages of just this one disease, so appropriately designated "the great white plague." Suffice to say it is occupying the time and brains of some of the best men of the world of to-day.

MORTALITY AND FREQUENCY.

If a disease carrying off annually on an average between 65,000 and 70,000 individuals in the United States alone demands so much attention, and will demand more and more so long as its ravages continue, should not another condition which carries off almost as great a number also demand a corresponding attention? The report of the United States government of the Bureau of the Census for 1904 gives the number of deaths annually from tuberculosis as averaging over 65,000 for the five years preceding, and the deaths from diseases of the nervous system as averaging over 60,000. It must also be taken into consideration that for a disease which blots out the lives of this number annually there must be some ratio in regard to the average number afflicted who are either partially or wholly incapacitated from earning either their own livelihood, or providing for those who are dependent upon them, and as a consequence must be taken care of and thus become a burden. The same government report gives the enormous number of 199,773 as suffering from diseases of the nervous system and who are in institutions devoted to their care and treatment. In addition, there must also be taken into consideration those who, because of inherited mental deficiencies or of ac-

* Read before the Indiana State Medical Society, at French Lick, June 18, 1908.

quired mental weaknesses, are burdened with a constitution which renders them incapable of taking part in the struggle for existence from the first, and thus, also, must be taken care of. According to the same report, there are of this number 17,000 given as being in and requiring institutional care and support. The cost of this care and maintenance amounts to about \$25,-600,000 annually. While there is this large number directly under institutional management and control, it must be remembered that this is by no means all that are thus afflicted, since it can be readily ascertained that there is just as large a number who are being taken care of either by private resources or eke out a parasitic existence as tramps, vagabonds, charlatans, criminals, etc.

IMPORTANCE OF SUBJECT INDICATED.

Recognizing these facts, it becomes at once evident that this is a question which deserves more attention than is being given it, and that it is not receiving the close study that its seriousness demands. The solution of the problem is unfortunately a most difficult one, more so probably than in any other branch of medicine, as there are so many different factors that come into consideration as causative agents. It is only too true that in such a disease as tuberculosis the active causative agent is vastly different from those in the subject under consideration, for in the one we have the invasion of the living body by a living organism, while in the other it depends more upon the action of outside agencies acting upon a constitution whose power of resistance is limited, or which possesses a susceptibility to those influences. But just as there are means being devised, measures being instituted and methods carried out which have for their object, and, as a matter of fact, succeed in lessening the ravages of tuberculosis and many other diseases of a kindred nature, so, also, can the lessening of the horrors of this condition be accomplished by the institution and adoption of proper measures. In order to indicate the probable and possible factors that will have to be taken into consideration in bringing about a solution of this problem, it will scarcely be necessary to go into details, but reference will be made to only a few of the more important ones.

HEREDITY AS A FACTOR.

It can hardly be denied that of all the factors which take part in the development of this condition heredity is the most important, not in that it directly transmits the pathological conditions manifested, although even that can be shown to be true in some cases, but in that it transmits an endowment, taint or predisposition which

renders the individual particularly susceptible to outside deleterious influences or agencies. Here, perhaps more than in any other class of patients, one is able to perceive the enormity of the sentence imposed upon mankind when it was decreed that the sins of the parents should be visited upon the children even unto the third and fourth generations.

It is unfortunately impossible to give an accurate estimate of the frequency with which a direct hereditary connection can be established, for as yet no reliable methods have been generally adopted to place it upon a statistical basis, but its importance must be paramount when it is recognized that all authorities maintain it to be a predominant predisposing factor. Another condition that makes it difficult to ascertain the frequency of hereditary connection is the fact that only too often when inquiry is being made to obtain the hereditary history of a patient, instead of giving what information can be given, an attempt is made, not only by the patients themselves, but also by those in a position to furnish such, to refute any possibility of it, under the mistaken idea that a more favorable aspect of the case will be presented, or from some other motive unknown to the examiner. Broadly speaking, it may safely be said that from 60 to 65 per cent. possess such hereditary transmission.

DRUG ADDICTION AS A FACTOR.

Probably the second most important factor taking part in the generation and production of nervous and mental disturbances is drug addiction, the most prominent of which are alcohol, opium and cocaine. Of all the exciting causes it seems probable that the injudicious and excessive use of alcohol takes the lead. But one must not lose sight of the fact that it is not always possible to determine definitely whether this drug addiction is to be regarded as a causative factor or as a partial manifestation of the disturbance, for it has been definitely proved that in many patients the latter is the condition existing. It is a well-established fact that the nervous system appears to be especially sensitive to the influence of alcohol, and in many cases suffers to a much greater degree than the other tissues from the effects of habitual and prolonged use. But even here heredity must be taken into consideration, for the tendency to drink is often inherited. Its relation to occupation, social status and personal surroundings is only too manifest to require any detailed discussion. It is impossible to give any reliable estimate as regards the frequency of its existence in this class of diseases, for it is a notorious fact that the statements of those addicted to its use are, as a rule, wholly unreliable,

and also because of the fact that some of those so addicted are able to conceal it from their surroundings for years, and it only becomes evident from some casual incident. But the seriousness of the effects of the prolonged or habitual addiction to drugs, particularly alcohol, does not limit itself to the individuals themselves nor indirectly to their surroundings, but is also manifested in the offspring, for such has been shown to be, if not the most prominent, at least one of the most prominent factors in the production of defective children, and in the transmission of a neuropathic or psychopathic condition.

VENEREAL DISEASES AS A FACTOR.

Another prominent factor taking part in the production of the diseases under consideration is one that hitherto has not received the attention that the seriousness of its effects demands, and one for which the medical profession in general is to be highly criticized and censured, because of its apparent indifference and apathy in regard to it. The action and effects of venereal diseases are so far reaching and in some cases so disastrous that it makes one shudder at the thought of the suffering it entails. It is a well-recognized fact that gonorrhea is one of the most potent factors in the causation of diseases of women. It is a prominent factor in morbidly modifying the sexual life and functions of both sexes, to a degree as yet too little recognized and understood, and with too little attention given to it along that line. Morbid appetites and desires leading to morbid actions and habits.

To what extent syphilis is to be regarded as a causative agent it is difficult to say. So far as general paresis and tabes are concerned, we know that the great majority of cases are the result of syphilitic infection, and the frequency of these two conditions alone is sufficient to stamp it with the brand of the strongest condemnation and to demand the consideration of methods leading to its extinction. But its action does not stop at this. While at certain stages its toxins seem to have a special predilection for nervous structures, yet throughout its whole course there is no organ or tissue of the body that is immune to its action, and its action is not confined to the individual infected, but is also manifested in the offspring. Its importance in this direction is at once evident when it is taken into consideration that at least 10 per cent. with certainty, and 15 or 20 per cent. probably, of imbeciles are the result of syphilitic infection in the parents.

FAULTY TRAINING AND EDUCATION OF CHILDREN.

In the faulty training and education of children is also found a most important factor in

the production of an unstable nervous and mental constitution. When we take into consideration the impressionability of the nervous system of children and their susceptibility both physically and mentally to external impressions and influences, it is not surprising that the effects resulting therefrom are instrumental in shaping and molding more or less definitely and permanently their physical and psychical make-up. The most powerful and most lasting impressions are, as a rule, those coming from the ones in direct control and care, particularly when parental. Unfortunately, only too often there is present in these parents a nature but ill-adapted to educate and train their offspring, due, on the one hand, to inefficiency and inadequacy and, on the other hand, to oversolicitousness and over-anxiety. Unconscious of their own weaknesses and defects, they all too readily instil the seed of an imperfect judgment into the organism which they are rearing and molding. But this faulty education and training is found not only in the home or in the guardian, but also in the school. How frequently do we hear of certain children being stigmatized not only because they are in part out of harmony with their surroundings, but also because the teacher and fellow-pupils fail to understand their character and constitution? It is difficult to determine definitely to what extent such faulty education and training are instrumental in the production of an unstable nervous or mental constitution, but the frequency of such disturbances at this time of life attributable to such causes is such as to indicate the necessity for a serious consideration of the question.

CLASS OF IMMIGRANTS AS A FACTOR.

Another condition which is regarded as a factor in this relationship is the class of immigrants that are being continuously dumped upon our shores. Just what is the relative proportion of such disturbances manifested as between those native born and those of foreign extraction is difficult to say, but Burgess of Montreal has shown that for Canada, at least, the proportion is decidedly higher in the foreign born, and it can be safely assumed that what is true of that country also holds true for the United States. And, furthermore, it is only too evident that the physical, as well as mental, status of so many of the class of immigrants that are being poured into the country is decidedly below the average.

THE STRUGGLE FOR EXISTENCE AS A FACTOR.

Still another factor, because of its prominence, deserves serious consideration, namely, the influence of the high pressure of so-called civilization,

the overwhelming desire to acquire an imaginary sufficiency of this world's supplies, the inclination and tendency to live beyond the means at command, the impetuous ambition to occupy the topmost heights in the social whirl, exert an influence which necessarily taxes to the utmost the mental and physical conditions of those engaging in the struggle. The struggle for existence is more strenuous and vigorous at present probably than at any other stage of this world's history, and in the struggle as between one with better endowments than the other, there is no question as to which will come off the victor.

There are many other factors which play a rôle either as predisposing or exciting causes in the production of this class of disturbances, such as prolonged illness, prolonged emotional strain, disturbed domestic relations, injuries, etc., but these come into consideration more in the domain of general medicine and are there dealt with: suffice to say that they only bring about the final breakdown.

CURATIVE AND PREVENTIVE CONSIDERATIONS.

In the consideration of the question as to how existing conditions can be remedied, or the agencies bringing about those conditions combated, it may be approached from two viewpoints, the one a curative, the other a preventive one.

CURATIVE CONSIDERATIONS.

So far as curative measures are concerned, one must consider those applied before admission into institutional care and those administered afterward. In regard to the latter not much can be expected beyond what is being done at the present time. In this, as in every other form of illness, the best results are obtained the earlier curative measures are adopted, and in the great majority of cases they have passed beyond this early stage before the question of admission is considered.

PART PLAYED BY THE GENERAL PRACTITIONER.

Upon the family physician falls the opportunity of applying those measures or administering those remedies at the time when the best results are to be expected. Few persons seem to realize the responsibility that devolves upon the general practitioner. While this seems to be an age of specialism and of specialists, they may all yield the position of honor to the general practitioner. He is the one who is called upon to face and meet first all the diseases and ailments in their incipency to which human flesh is heir. He is the one called upon to give first aid, and, as a rule, only when he fails to give relief do the patients resort to those engaged in a specialty, and that these frequently fail also is indicated

by the numerous methods adopted by so many who, without any or very little preparation beforehand, endeavor to remove, and in some cases do, that which the physicians fail in. These methods are not always such as appeal to what appears to be just and honest, and some to be anything but reasonable, but there are some patients who will yield to such measures when more rational ones fail to make an impression. Great public prominence is often given to such cases, but we rarely hear much comment concerning the scores who receive no benefit or are even made worse. The injury in these questionable methods is in that they are carried to an extreme, are applied to conditions where they do positive harm and can not possibly accomplish any good. Amongst the foremost of these is Christian Science and allied principles. That it does good in individual and properly chosen cases is unquestionable, but that it can nullify the action and effects of a tubercular infection, of a diphtheritic infection, of a syphilitic infection, or, broadly speaking, of any disease in which there is a structural organic basis, is a condition beyond comprehension, and the danger attending the assumption that such is possible, and the treatment carried out accordingly, is fraught with such direful results that those guilty of such indiscriminate methods of treatment should be made to suffer the consequence.

PREVENTIVE MEASURES FROM AN EDUCATIONAL STANDPOINT.

To the realm of preventive medicine must we look, however, for the greatest beneficial results in lessening the frequency of those disturbances. From this standpoint, education must be the fountain head of our measures to combat these conditions. Just as education has been, and is, one of the predominant means utilized to inculcate the principles and conditions which, when put into action, have lessened the ravages of all infectious and contagious diseases, so well illustrated in the crusade being carried on against tuberculosis, so also must reliance be placed upon education of the masses, of the conditions tending to produce abnormal nervous constitutions, or abnormal functioning of an apparently normal one, and upon education in the measures to be carried out which will tend to lessen and limit the existence of those conditions, and when a proper conception of the gravity of existing conditions has been inculcated and appreciated more stringent measures can be readily instituted. The question of a more thorough education of those choosing the profession of medicine as a life work comes first into consideration along

this line. Considering the frequency and seriousness of this class of diseases, on the one hand, and the limited time and attention devoted to their study in the educational institutions in which such fundamental knowledge is acquired, on the other, it is at once evident that one of the first steps to be taken is in that direction. The scientific study of psychology has not kept pace with that of other branches of medicine. Too little attention has been given to it, and as a consequence we know very little in regard to the normal mechanism of the psychological processes; how can it, then, be expected that pathological processes will be any better understood, much less intelligently and scientifically treated? It is time that the institutions for medical education awaken to that fact and act accordingly. There are encouraging indications that some of these educational institutions are giving more time and attention to the study of psychology and psychological processes, both in the normal and abnormal, but still more is required.

As has already been stated, upon the family physician falls the responsibility of applying measures during the earliest stages of the disturbances, and to him must we also look for the diffusion of that education which must play an important rôle in the realm of prevention. He unconsciously becomes the family mentor. His knowledge of the physical and mental weaknesses and defects makes it possible for him to advise where another neither could nor dared. In his relation of confidential intercourse with the family he exercises an influence which but few, if any other, could reach. Consequently the necessity of being prepared to detect the danger signals, to advise and administer the proper preventive measures, is so evident as to need no further discussion.

TREATMENT OF HEREDITARY INFLUENCES.

In regard to the question of heredity, a close study of the situation reveals the fact that it is a most difficult problem to solve. It may seem harsh, unjust and even inhuman to resort to measures which will involve personal rights and liberties, but when it comes to a question that not only entails the welfare of the individual and of the community at large, but also the welfare of future generations, there should not be an overconsideration of those personal rights. While leniency can, and should be, shown to those unfortunates who possess constitutions that render them susceptible to such disturbances, for much can be done to prevent their development, to lessen their intensity, and to ameliorate their conditions, yet when it becomes evident that the

propagation of the species means the propagation of beings whose physical or mental constitutions possess endowments and stigmata which must render them incapable of competing in the struggle for existence, and consequently make them a burden not only to themselves, but also to their environment, the question of sacrificing those rights should be seriously considered. Viewing this question from an impartial standpoint, or as nearly impartial as it is possible so to do, does it not seem more just and humane to all concerned to limit the suffering and sorrow to the individual rather than permit it to be transmitted to those who unfortunately must bear the curse of their inheritance whether or not? To those who may feel justified in thinking otherwise, let them consider the hordes of tramps, vagabonds, criminals, etc., scattered broadcast over the land; let them visit the halls and corridors of our charitable institutions, of our institutions of correction and of penal punishment, and let them remember that at least 60 per cent. of this class have inherited a constitution which is responsible, in a great measure, for such a condition of affairs; then, perhaps, they will take a different view of the situation and be willing to admit that, at any rate, something should be done to lessen and abolish such human sorrow and affliction. There is no state in the Union but has some form of law to regulate the marriage act, rude though they be in some of them, but more stringent measures are necessary. Too many are permitted to enter the marriage state whose propagation can not fail to produce anything but creatures who are a burden to themselves and a curse to the community. Some states have established institutions for the custodial care of the feeble-minded, and these unquestionably are a great blessing to humanity, and, on the whole, a source of public economy, but their number is far below what is required, and their influence is far too restricted. This custodial care and the question of the propagation of the species should not only include the feeble-minded and defective, but should also extend to those who have acquired a constitution or condition that must inevitably transmit its baneful influences to the offspring.

PREVENTIVE TREATMENT OF DRUG ADDICTION.

What has been said of heredity applies almost equally to the question of drug addiction. Alcoholism, the most prominent and extensive of these, is receiving probably more attention than any other condition active in the production of nervous and mental disturbances, but not for this reason. An active propaganda is being car-

ried on in various channels, having for its object the lessening and abolition of its use. Various methods are being utilized in an attempt to disseminate a conception of the baneful influences and dire results following excessive or prolonged consumption. Various legislative measures are being enacted, tending to lessen and prohibit its distribution, but more stringent measures still are necessary. When it becomes evident that an individual has so far lost the personal respect and morale that he owes not only to himself, but to his environment, when morbid appetites and desires have grown beyond control, it is only humane and just that they, too, should be placed under custodial care, which would exercise a supervision which can not be procured otherwise. This necessity is still further warranted in that too many are unable to control their ungovernable appetites even in spite of the personal remorse, in spite of the heartaches and suffering that they cause to others, and in spite of the imposition of fines and even imprisonment temporarily.

But there is another point to consider in this connection. It can not be doubted but that to the offspring of individuals whose bodies are continuously saturated with and bathed in alcoholic beverages, or other drugs, whose minds are dulled and stupefied, rendering them incapable of recognizing and realizing the curse they are, not only to themselves, but also to their procreation, is transmitted a constitution which is far below the average, and which so frequently manifests itself in the form of some neuropathic or psychopathic derangement, or even imperfect development. Bourneville has shown that in 1,000 cases of imbecility, alcoholism was present in the parents in at least 620. No comment is necessary in regard to the conclusions to be drawn, or the preventive measures that are indicated. It is sufficient to ask the question, Whether or not such creatures, for the mere gratification of their passions, should be allowed to propagate their species, which must inevitably bear the consequences and suffer the penalty of such an inheritance?

TREATMENT OF VENEREAL DISEASES.

The relation of venereal diseases in regard to causation has already been pointed out, and so far as treatment is concerned but little can be expected, more than is being done at the present time. There should, however, be more active steps taken, more energetic measures instituted leading to the prevention of its dissemination and to its abolition. It is time that the members of the medical profession were aroused from

their apparent indifference and apathy, and goaded to the education of the laity as regards the injurious actions and horrible consequences resulting from this evil. Its very insidiousness and privacy endow it with a relative degree of danger. Why should this class of cases be exempt from the publicity or quarantine any more than tuberculosis, smallpox, diphtheria, etc., for it is just as infectious, and, although the immediate effects are not, perhaps, so directly dangerous to life, yet its ultimate effects are many fold more productive of constitutional disturbances, and these, in turn, must involve the neuropsychical. It is time that the mantle of this false sense of modesty and secrecy be thrown aside and the condition placed upon its proper basis.

RELATION OF ILLEGITIMACY.

Closely allied to this class of cases is another group of unfortunates who, while victims of the results of the gratification of their own passions, yet, on the whole, are deserving of more leniency and generosity than is, as a rule, meted out to them. It is a condition which involves not only the young and ignorant just entering upon that stage of life wherein they are brought to a realization of a special element in their nature, but it also involves those of maturer years, who, because of their knowledge and experience, should have exercised better judgment. It is a condition that will exist so long as there are individuals of the two sexes. It is a condition which is not to be countenanced, but condemned from every standpoint, and yet it is a condition which, when it does arise, is deserving of at least some consideration. The poor unfortunate who, in response to one of the most powerful forces in her nature, steps beyond the threshold of virtue and morality, becomes disgraced and shunned by all society, except, perhaps, a few vultures who hover about her only to feast upon her misfortune or intensify her misery, is called upon not only to suffer the pangs of hell herself, but also to propagate a being who throughout life must bear the stigma of illegitimacy. Is it to be wondered at that this is also a source of many admissions to our charitable institutions, or the source of many a degenerate, physically, mentally or morally? Here likewise education fails to accomplish what is desired. In spite of the fact that the principles of morality and virtue are inculcated into their minds from earliest childhood, in spite of the fact that the evil consequences which are almost inevitable should the step be made beyond the threshold of those principles, are observed day after day, month after month and year after year, yet its existence and

frequency have not lessened; consequently it is a problem which must be taken into consideration in the measures instituted for the lessening of the disturbances under consideration.

DEFECTIVE IMMIGRANTS.

So far as the question of defective immigrants is concerned, it is gratifying to note that the requirements for admission into the country are being raised higher year after year, and it is only a question of time until a standard is reached which will place them upon a basis equal to that of the native born.

SOCIAL CONDITIONS.

In the various causative factors that have hitherto been considered, the conditions have been such that remedial measures were not only possible, but quite probable, for sooner or later public opinion will become alive to the necessity of exercising more energetic and stringent means to lessen such a source of sorrow and suffering to humanity. But there is another condition, so complex and so far reaching, involving so many different elements, that it is most difficult to determine which of those elements are the most dominant, or how they are to be regulated. It is the condition of affairs participating in the struggle for existence. Among the more prominent of these elements may be mentioned the continued high tension, physically and mentally, of those engaged in the struggle to keep abreast of, or to supersede their fellow, the increasing participation of the female sex in vocations and occupations which formerly were limited to members of the opposite sex, the high nervous and emotional tension due to the increasing demands of the social whirl, the baneful influences resulting from the conditions leading up to and terminating in divorces, and many other closely allied conditions. Of these there is one class particularly which deserves the severest criticism and censure. This is a class that is unwilling to exercise the care and attention that the fulfillment of the marriage vow entails, who resort to every means conceivable to prevent or interrupt the process of conception even at the risk of their own lives, a fatal termination of which is only too frequent. No one but the medical profession knows how many otherwise healthful lives are sacrificed annually, either directly or indirectly, from this cause, upon this altar of imaginary self-protection. Failing in the attempt to prevent, they chafe under its continuance, they shrink from the duty and care that it will necessitate, and too often they nurture an unkindly feeling toward the offspring, and too often place it into the hands of an entire

stranger to nurture, at a time when nothing is so essential to its healthful development as its natural nourishment and protection. Is it any wonder that under such circumstances there is brought into existence a being possessing a constitution but poorly supplied with the forces capable of withstanding the influences against which it must struggle?

These are only some of the more important factors instrumental in the production of nervous and mental disturbances, which, as yet, do not receive the attention from this standpoint that their importance demands, and the consideration of which must concern the question of the lessening of this scourge of human health and happiness.

DISCUSSION.

Dr. G. W. McCaskey, of Fort Wayne: I will not take up any time in criticism, but will limit myself to the discussion of two or three points that will bear emphasis. One of the questions which the Doctor has emphasized very particularly is that of heredity. We all of us understand the influence of bad heredity on children and the different diseases resulting from it. As the Doctor has said, it is not the disease *per se* which is usually transmitted, but the hereditary tendency; some condition embryonic in its origin, some condition of the nervous system or other organs which makes that individual more susceptible to disease. More particularly is this true of nervous diseases, and that is what we are now considering, and we would like to impress the position which the medical profession should feel and exercise toward the unfortunate class of society, because we know if we could control these conditions during the development, during the prenatal period, much could be accomplished. Oliver Wendell Holmes said: "Our education begins a century before we are born." It certainly begins several months before, and the early months and years are certainly important in the development of the nervous system. Usually the effects of inebriety are nervous diseases and venereal diseases and a large class of other diseases, and I want to emphasize our obligation. We should feel our obligation on this question and do our part to educate the public and make them understand the importance of the prevention of these diseases.

The question of drug addiction is an old and time-worn one. We do not understand the phenomena of it. We understand its far-reaching importance, and we are perhaps doing what we can. It is true with drug addicts and with those suffering from venereal diseases we meet with the progeny suffering from disordered nerves. We may feel the desire for gratification of those tastes and passions implanted in us by Nature; however, I believe it is our duty to

press along these lines and educate the public up to the point of a reasonable degree of control being extended over society in these things which are undoubtedly a menace and which are producing disastrous results upon the body.

The Doctor mentions the responsibility of the general practitioner in the early recognition and treatment of nervous diseases. I would like to emphasize this point, also. As the Doctor has said, practically every case of nervous disease first falls into the hands of the general practitioner, and it is often true that it goes on perhaps because the physician fails to recognize the disease in its incipency. It is true of the heart, lungs, etc., as well as of the nerves and mental diseases. After the case has developed into insanity the problem is a very different one, and it is astonishing how many cases of severe insanity could be successfully treated by timely measures. Those slight deviations from the normal mental state of the individual should have more importance attached to them by the family physician than has before been done, and the family physician should see that they do not go on to pronounced cases of insanity.

I agree with the Doctor in a general way that the integrity of the social body is more important than the individual. It is a fundamental principle of our government, "the greatest good to the greatest number." We must restrain individual liberties in order to get best results for the general public, so I believe there is a limited class in which this is profitable. I think it is a little premature, perhaps, to press this, other than to attempt to educate up to the point where they will recognize its importance and take the measures to effect their control. The same is true of venereal diseases. The whole problem is of a difficult character and I fear it will be several generations before the profession can be anything like a unit, and still longer before the public can be made to see the necessity of the public dealing in this way. The whole subject of nervous and mental diseases is extremely interesting, and is the necessary result of the extremely strenuous life we are living, and we see it on every hand; nervous systems breaking down and people suffering from overstrain because of the strenuousness of modern life, and while we see things that ought to be done we have got to move slowly. This means almost a revolution, so we must move slowly, educate the profession first and the public at the same time, if possible, because they need it.

Dr. Albert E. Sterne, Indianapolis: I want to corroborate the propositions which the essayist has set forth, but I want to emphasize in particular two things. The first of these deals with the popular idea that mental diseases particularly arise from natural causes. That is especially true in the beginning of mental diseases. When a mental disease arises it has a

basis. It makes no difference whether or not there is in that disease an organized pathology; there is a physical basis from which this case arises, and it is our duty to recognize that, and it is a delusion that mental diseases are heaven-sent or hell-sent, as the case may be. Another question of extreme importance I want to speak of. There is no doubt at all that heredity and hereditary influences play a considerable rôle in the manifestation of disease. At the same time we should recognize that there can be no doubt of the fact that by preaching this doctrine of heredity, pure and simple, we as a profession are doing a great deal of harm. We should recognize heredity, but we should be very careful of impressing too strongly upon the progeny that he or she will suffer by a disease because the parents suffered from that disease. I am thoroughly convinced that many a man and woman has committed suicide because the idea was engraved on their minds that because some ancestor has committed suicide that he must have that tendency. And, gentlemen, we must understand that diseases are not actually hereditary. No disease is hereditary. That is, if we understand the proper derivation of the word "hereditary," namely, that such a disease exists from the prenatal conception. We have a tendency, but no disease is hereditary as such, not even syphilis. When syphilis exists in the ovum it is acquired syphilis, and there is a vast difference between congenital diseases and inherited diseases. I want to emphasize these things particularly, because we can do a great deal of damage in putting too much stress on heredity. We must educate the people, but we can accomplish a great deal of harm by the tactless use of our knowledge about the true aspect of this question.

Dr. F. B. Wynn, of Indianapolis: The great thing in medicine at the present day is prevention. We are prone to think of prevention as applied to such diseases as are of known germ origin—diphtheria, tuberculosis and such diseases—and the sanitarians are certainly accomplishing a great work in this line. Now it appeals to me that there are other fields in which prevention is just as possible, and I should place preventive medication under three heads: First, the prevention of communicable diseases; second, the prevention of social conditions—improvement of social conditions, educational development and the like, and, third, I should make it apply particularly to those diseases from the use of various insanitary articles which are used either as drugs or medicines. That is a good thing, and all concede that the future of medicine is along the line of prevention, and the doctor of fifty years in the future will be a very different man, because he will be paid really for preventing disease rather than to cure it. I just want to refer to the third thing, namely, the question of drug addiction. I came near miss-

ing this meeting because just before I started I was visited by a lawyer who requested that I should go and talk to a man who was a subject of the cocain habit, having acquired the habit by the use of an atomizer or something of that sort. I am afraid he is a ruined man. I believe as practitioners we should take that home with us, because we are prescribing cocain and morphin and because in one way or another we have been in part responsible. I know that it is true that these habits are acquired through the use of patent medicine, but how often do we prescribe remedies for cough in which there is opium, and our patients get the prescription refilled again and again, and so without our knowledge these habits are being formed. I never prescribe morphin without I give it myself. I believe you ought to prescribe these things yourself and not write prescriptions for people to have filled over and over again, and so with cocain.

Dr. F. F. Hutchins, of Indianapolis: There is another feature in the mental and nervous diseases that it does not seem to me has been touched upon. It is true there is a physical basis, but I do not believe that physical basis is a diseased one. The patient may be a man of genius perhaps; it may be that he began wrong, was badly trained. If that is it, this trouble lies in the hands of our educational fraternity, the early educators in the schools, but that ought to be combined with the physician's influence, because in this environment lies the situation at the present time. If there is one thing we need in these cases of neurasthenia it is the old-styled faculty of common sense—it is good common horse sense. We have these cases coming to us with distorted ideas and opinions which seem to us ridiculous. What is the thing at fault? It is simply the inability to see themselves as they are. If, instead of trying the various forms of hypnotism, sending them off on trips—if we would simply take these patients and on the idea that "a little knowledge is a dangerous thing" work the thing out on a sensible basis, and say to them if you have this idea you must give a reason for it. Have them reason out these ideas and see that these reasons bear the light of investigation. If they can not do that in the conversation, have them keep a book, a ledger, and have them keep an account of every idea and have them present the reasons for and against and then go to some person and sit down and reason it out with them on the ground of common sense. Many of these brains are simply twisted—warped—and if we have hereditary strain we can not help that. We can not take that strain off of these people, and we have got to train up these brains to meet it and that can only be done by developing the reasoning faculties.

Dr. George T. McCoy, of Columbus: I just want to speak one word. The question of heredity has been brought out very fully and the ques-

tion of early training has only been hinted at. I believe that the early training of the child has much to do with its history thereafter, and at the risk of being called an old foggy I will say that I am opposed to the kindergarten for that reason. You educate the mental, and I would much rather that my children spend their time making mud pies and wading the creek than attending kindergarten.

Dr. G. W. H. Kemper, of Muncie: There has been something said in the paper, and very particularly too, in regard to the alcoholic question. And I notice that heredity in this day always hits the boys and not the girls; so I am inclined to think that with the man inclined to the habit that it is the example he sets for his sons. He takes his boys to the saloon. He does not take his daughters. We talk a great deal about the alcoholic question—and I am not a Prohibitionist, never voted the Prohibition ticket—but in the last few years I am wonderfully down on the saloon and I want to see the day come when the saloon is banished. It is one of the vents of hell for the habit of intemperance and for every other vice and crime that has been mentioned in these papers here to-day. God help us to vote it down!

Dr. A. C. Kimberlin, Indianapolis: Some one has said that if parents would buy skates for their children instead of books they would have a much happier family. There is a story of a certain king in whose family there was a tendency to insanity. The king had one son. He educated this son separate and independent from any one who was predisposed to insanity and did everything that medical skill could devise to protect his son. He kept him away until he reached his maturity, when he was suddenly seized with insanity. Certainly we have to stand aside for heredity. Drug addictions, etc., become causes. Everything that plays with the powers of reason is most disastrous, but, as Dr. Hutchins has emphasized, the victims are those who have been well trained, of good social standing, and we have to go back to a family evidence of an unbalanced mind, and there is a predisposition that we must take account of. Yet we should be exceedingly careful in making representations to the case. They respect you and they esteem you as their friend, and what you say is not manifest then, but we find the influence of it later.

Dr. Charles F. Neu: I have nothing in addition to add to what has been said. As mentioned in the paper, the coming thing is prevention, and the first step is the question of education. I quite agree with Dr. Sterne that it would be most injurious to impress upon any individual the influence of heredity. The first point is educating the physicians themselves. That is where it should begin in order that we may be in position to recognize the progression of these more marked things which are to follow.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

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EDITORIALS

THE FIRST YEAR OF THE JOURNAL.

With this number *THE JOURNAL* closes the first year of its existence. Appreciating, as we do, the difficulties that were encountered and the obstacles to be overcome in the establishment and maintenance of such a periodical, we feel justly proud of the record. Starting in with less than half the capital required to finance such an enterprise, and being compelled to accept proffered individual financial responsibility for the balance, the Association is fortunate in now having a journal which is closing the first fiscal year without a deficit and with prospects for the future which augur well for an increase in its size, an improvement in its quality and a widening of its sphere of usefulness.

In the beginning it was thought hazardous to print even 48 pages each month, owing to the large expense of such a journal, and the small dues and correspondingly small amount of money available for publication expenses. But with the exception of one month *THE JOURNAL* has regularly contained from 56 to 72 pages, and the arrangement and mechanical work has made it equal to, and in most instances better, than any medical journal published.

During the year there have been published 54 original articles, 11 special articles, 18 district society reports, 182 county society reports, 59 death reports, 24 book reviews, the proceedings, program and announcements of the Indiana State Medical Association, and numerous general editorials, editorial notes, communications, personals, news notes, etc. *THE JOURNAL* has regularly carried a full page devoted to a county society directory, a page devoted to a list of the officers and committees of the Association, and a half-page devoted to a list of the officers and announcements of the district societies. It has also printed the program and announcements in advance of the Association's annual meeting.

Each month a large number of sample copies of *THE JOURNAL*, accompanied by a letter soliciting memberships for the Association, have

been sent to physicians not identified with any medical society, and letters running into the hundreds have been sent county society officers in connection with the work of organization. Work upon a biographical index of all of the physicians of the state has also been started.

The advertising has been above criticism, and in carrying out the policy of not accepting objectionable or nostrum advertising it has been necessary to refuse proffered contracts amounting to over \$3,000. The determination to publish a journal clean in its advertising pages has not only met with the approval of all right-thinking doctors, but it has also met with the approval of the better class of advertising patrons who are glad of an opportunity to be placed in a distinctive class that obtain position through merit and fair dealing with the profession.

The editorial and business policy has been to conduct all the affairs of *THE JOURNAL* in a manner to the best interests and credit of the Association and the medical profession of Indiana. The business affairs have been placed on a system whereby a large amount of work can be carried on with the least expenditure of time and money and with the greatest degree of accuracy. A system whereby all reports and correspondence is filed and carefully checked makes it possible to reduce errors to the minimum.

The editorial expressions in *THE JOURNAL* have been uttered in a spirit of endeavor to uphold the principles which should be sanctioned by every progressive and conscientious physician.

For the many cordial words of general appreciation of *THE JOURNAL* and its work which have come from every section of the state, the editors are very thankful. For the very few complaints that have been entered the editors feel regret, even though they realize that it is an impossibility to please every one. The editing and management of a medical journal is no easy task, as any editor of experience will testify, and the man does not live who can edit any kind of a periodical and not have some one think the effort unproductive of any good. The more fearless the editor is in expressing views in the interest of truth and justice, the more surely he will court the displeasure of those who profit directly or indirectly from courses of action contrary to those approved by the editor, or who are chronically in a state of dissatisfaction with everybody and everything. Some people are only happy when they are fault-finding, and the medical profession is not yet composed of only those who are always satisfied and never displeased.

The editors of *THE JOURNAL* realize that their work can be improved upon, and in their desire to add to the value of what is being done for the Association they have solicited and profited by the suggestions and advice of numerous influential members in the Association. They are in particular indebted to the members of the Council, under whose immediate control *THE JOURNAL* is published, for valuable advice. They also feel grateful for the cooperation of many county society secretaries in efforts to make *THE JOURNAL* what it is intended to be, a journal in which every member of the Association should feel a sense of personal interest and pride.

Beginning with the January number, it is expected that *THE JOURNAL* will appear regularly with 64 pages and upward, and an effort will be made to improve the quality of material furnished the readers. But to obtain the best results the editors should have not only the encouragement, but the active assistance of all the members of the Association. This can be shown in no better way than by an exhibition of enthusiasm and interest in the work of the county society, and insistence upon a report of the work of the county society and its members for publication in *THE JOURNAL*, as also a report of things personal connected with the medical profession. It can also be shown by an active interest in the effort on the part of the editors to secure increased advertising patronage, upon which entirely depends the possibility of enlarging *THE JOURNAL*.

THE JOURNAL is owned by the members of the Indiana State Medical Association, and in a very large measure its success depends upon the support the members of the Association give it. The editors are willing to put energy, time and thought into the work of producing a good, clean, practical and up-to-date medical journal, but they solicit and deserve suggestions and friendly criticism of their work, and cordial cooperation from those who are equally interested with the editors in giving the Indiana profession the best journal that can be produced under the existing conditions. What has already been accomplished in the short period of one year is a credit to the Association, but we should not be satisfied with anything but better results for the coming year. We should all put our shoulders to the wheel, to the end that at the close of another year we may say that the progress of the county society, the Association, and *THE JOURNAL* has been steadily forward in the direction of larger and better things.

ETHICS OF COMPULSORY OPERATIONS.

In its issue of Nov. 14, 1908, the *Literary Digest* presents a criticism from *The Hospital* (London, October) upon the recent action of surgeons of the Cook County Hospital who, because of parental opposition, were forced to appeal to the court for an order directing the amputation of a boy's arm because of gangrene following a fracture.

The English organ comments thus: "We should not like to question the accuracy of this paragraph, but as it stands it is a little startling to British ears, accustomed to a large degree of personal freedom, and impatient of official interference in matters affecting the individual as opposed to the collective health. However important it may be to secure obedience to medical orders, it seems doubtful whether—even in the ideal republic—the enforcement of a surgical operation should properly come within the jurisdiction of a court of law. The action of the Chicago court in this instance, although certainly in the best interests of the 14-year-old boy, savors somewhat of a violation of the liberty of the subject. To perform an immediate operation, without waiting to obtain permission, upon a hospital patient whose condition is one of extreme urgency, is one thing; but to resort to compulsion (whether legally sanctioned or otherwise) when persuasion has failed is quite another. For his own sake, as well as in the public interest, an ignorant person can be isolated against his will if he breaks the law, or if he becomes afflicted with mental or infectious disease, and education and vaccination also can (with more or less success) be thrust upon him, but the time scarcely seems ripe for compulsory operations."

Although unacquainted with the details of the case further than has been outlined above, yet we have every confidence that the radical measure adopted was resorted to only as a dernier one, and with life-saving interest at heart. So that one is at a loss to understand the justice of so narrow a view as that taken by our English cousin. Could he for one moment consider that in as capably conducted an institution as the one referred to, with a service covering thousands annually, a surgeon would proceed thus with any other purpose than that of saving the life of his patient? And why should such a patient be allowed to die from the toxemia of his gangrene, be it the result either of his own or another's ignorance or wilfulness, any more than a suicide should be allowed to carry out his own wilful destruction?

To us it would seem an indication of the good sense and broad judgment of our courts that they should issue such a decree, the more promptly the better, and by following any other course than the one pursued both judge and surgeon would be derelict in their respective duties toward mankind.

THE ETIOLOGY OF CANCER.

In opening the symposium on cancer, at the second triennial meeting of the International Society of Surgery, held at Brussels last September, Roswell Park took a very decided stand in behalf of the parasitic etiology of cancer, and adduced some very convincing evidence in support of his view. Like many another, he believes¹ that, when we consider the 40,000 deaths annually in Germany, and as many in the United States, from cancer alone, the subject is worthy of even more persevering investigation, and he feels that enough is being at present accomplished to warrant encouragement. That more progress is to be expected from the study by the clinician than by the pathologist is more or less patent to all, because it is the former who comes into personal contact with the disease in its early and living forms. Furthermore, and by reason of such contact, the observant clinician, Park declares, can not fail to note the striking evidences of infectivity of the process. The alacrity with which the profession accepts the infectiousness of many other diseases, as leprosy, syphilis and several other distinct clinical entities whose parasites either are not known or do not meet the requirements of Koch's postulates, as scarlet fever, measles, smallpox, malaria or yellow fever, and yet refuse to accept a similar origin for cancer, the essayist would attribute to the blind faith of the pathologist in the teachings of Virchow and his followers. The laboratory man is so engrossed in the study of the evolution of this attractive cell, the theories of its evolution and life history that he is led to ignore its clinical course and picture. Two hundred and fifty years ago Tulpus, the Dutch anatomist, made the statement that "cancer is just as contagious as inflammation of the eyes." In 1730 Junker maintained that cancer is contagious, and Harvey declared that tumors strongly resembled parasitic productions in the vegetable kingdom; statements founded on the broad observation of great men of the past.

Although transmission of cancer by direct contact often occurs, as from one lip to the other, or from contiguous surfaces of the bladder, yet immediate contact is not always necessary, as is instanced by cancer of the stomach produced by swallowing vegetations from an esophageal cancer, or cancer of the lung from esophago-tracheal cancer.

Indeed, Park takes the stand that time is wasted, progress delayed and regular pathology made ridiculous by considering the disease from any other standpoint than an infectious one, and "would simply pay a surgeon's compliments to those who find it necessary to imagine a specific cancer cell of spontaneous origin, or a parasitism of epithelial cells, and those who seriously believe any epithelial cell can become a parasite or act like one from any innate tendency or intrinsic cause." He cites a recent personal experience concerning a woman of 55 with cancer of the uterus, who lives in a little farmhouse where she has within a short time cared for a father who died of facial cancer, a sister dead from mammary cancer, and another relative who must have had cancer of the stomach; "what explanation," he asks, "can be offered for such a sudden local epithelial rebellion except by an invasion by some outside intruder?"

From the clinical standpoint are offered the following reasons for believing in the infectivity of cancer:

(1) Direct transmission from a diseased to a previously healthy area, as from lip to lip, or during operation, as when tapping for cancerous ascites.

(2) Cancer à deux, as from wife to husband, from patient to laundress.

(3) Cancer houses, i. e., homes in which there have been so many cancer deaths as to suggest strongly that the dwelling is infected.

(4) The epidemic appearance of cancer within definite boundaries.

(5) Metastases, in which the infection has been transferred by the germ-laden cell, these metastases occurring earlier and more frequently in organs without a capsule, as the mamma, tongue or pharynx. Likewise the remarkable growth-energy of the cancer cell must come from an external source which is closely connected with the capacity for penetration and infiltration of the surrounding tissues.

From the experimental side there are to be considered: (a) The analogy of tumors in the vegetable kingdom, and the character and course of all sorts of tumors of the lower animals. (b) Epidemic appearances of cancer among animals

1. Surgery, Gynecology and Obstetrics, November, 1908, p. 536.

many times reported and instanced by Gaylord's recent observation of cancer cages used in the Buffalo Laboratory. (c) The very interesting work done in the actual transmission of unmistakable malignant tumors between animals of the same species, by Loeb, Jobson, Hanan, Nowinsky, Moran, Jensen, Gaylord, Clowes, Beebe, Crile and others on carcinoma and sarcoma in cattle, rats, mice, dogs and rabbits, these studies including the questions of inoculability and subsequent immunization from such tumors. (d) Occasional successful causation of tumors by injection into animals of human products. (e) The general behavior of the disease, namely, its resemblance to other known infectious conditions, with reactions to certain serums, its tendency to hemolysis, its behavior to transfusion, its ending by some terminal infection, and all the other well-known evidences of infectivity. (f) The same tendency to metastasis, with the same explanation as occurs in other infections, and the same rare tendency to spontaneous retrocession which has been noted in human cases. (g) The practically complete demonstration that in animals it is an infectious disease and the unavoidable inference that if it be so in them it must also be in man.

Unfortunately the only evidences of transmission between human beings must be clinical, since sentiment prevents that experimentation which might settle the whole question. This the essayist holds to be a false sentiment and believes that hardened and condemned criminals should be subjected to such investigation, and be thus made to render their tribute for the benefit of others. Indeed, he asks why they should be brutally executed when something of great value might be learned through them.

If cancer were a constitutional disease, there would be about as much use in operating as in amputating the foot of a gouty patient, while as a matter of fact thousands have been cured by early operation, and recurrence has only been the result of early metastasis or late operation instead of the reverse. Healthy tissues seem invulnerable to the cancer parasite, the causes predisposing to the acquisition of the disease, including whatever impairs the powers of resistance, chief among which is the tissue degeneration due to obsolescence of organs or general senility.

The omnipresence of the cancer parasite obligates us to the same prophylaxis that would obtain for any filthy disease and the same preventive measures should be adopted as for any contagious disease. While an advantage in treat-

ment is at hand because of the fact that at first cancer is a local disease, yet unfortunately it is "a disease without a symptomatology of its own," and is recognized only by signs which are usually recognized at a period too late for the radical cure by surgical measures, as yet the most reliable therapeutic measure.

While exception might be taken to so radical a stand as that assumed by Park, yet, in the main, his logic is sustained, and at present the outlook for the conquest of this terrible scourge seems more promising by regarding the disease as infectious in origin than otherwise. The excellent progress being made along the lines of hemolysis points toward such an etiology and bids fair to give us the clue to early diagnosis that is afforded by tuberculin in its realm, the absence of which diagnostic aid has been so universally recognized and so much lamented.

EDITORIAL NOTES

WE wish for you all a merry Christmas and a happy and prosperous New Year.

THE Association dues for 1909, amounting to the large sum of *one dollar*, must be paid some time during January. Why not pay *now*?

THE Association assessment is due and payable January 1, and becomes delinquent February 1, when the names of all those who have not paid will be canceled from the mailing list of THE JOURNAL. Get busy and send in your dollar now. Your county secretary is ready to receive it and will undoubtedly forward it at once.

THIS number of THE JOURNAL contains an index for the year. It will prove valuable for those members who wish to bind their journals. We have a few back numbers which we shall be pleased to send to those who wish them for completing files. Write us stating numbers desired and enclose postage to cover cost of mailing.

IF EVERY physician who reads a paper before a county society would make a short abstract of his paper and hand the same to the secretary of his society for use in making a report for THE JOURNAL, our department devoted to society pro-

ceedings would be much more interesting and complete in its record of the work done by the county societies. It would also save the county society secretaries much work.

MANY news notes, personals, and society reports are received between the first and the tenth of the month with request that they be published in the current number of *THE JOURNAL*. Occasionally it is possible for us to publish this late arriving copy, but as a usual thing our forms are arranged early in the month and our printers either refuse to use late copy or use it on the understanding that it will delay the mailing of *THE JOURNAL*. We, therefore, earnestly urge all contributors to send in copy before the first of the month.

WE ARE now compiling, at considerable labor and expense, a biographical index of the physicians of Indiana. Such an index will be of great value to all officers in carrying on organization work, and it is almost a necessity for *THE JOURNAL*. The county society secretaries have been asked to assist us in the work of securing a list of all of the physicians in the state, and the proof sheets recently mailed to secretaries for correction and revision have begun to come in. We wish to thank all those who are giving us such cordial and painstaking assistance in carrying out our plans. The work is in the interest of more effective organization and will indirectly prove of value to the entire medical profession.

BEGINNING with the next issue, *THE JOURNAL* will publish a series of historical articles on "What Indiana Has Done for Medicine" under the authorship of Dr. G. W. H. Kemper, of Muncie. No man in the state is better able to write the medical history of Indiana, and, while the editor of *THE JOURNAL* feels personally responsible for draughting Dr. Kemper into this laborious work, it will be a source of satisfaction to all to know that the duty has been assumed by one so deservedly qualified. Fortunately Dr. Kemper has in his possession or knows where he can obtain the data concerning the early medical history of the state. In a few years it might be impossible to secure this data, and we are, therefore, fortunate in being able to make it a matter of permanent record.

ALTOGETHER too many deaths from diphtheria are reported in Indiana. Physicians and public should know that antitoxin is a specific in the

treatment of diphtheria and that a death from diphtheria in almost every instance means that either antitoxin was not administered, or, if administered, was not given early enough or in sufficient doses. It should be borne in mind that the state now furnishes antitoxin for use in the treatment of patients too poor to pay for it. The remedy may be obtained in almost any town or village and can always be secured in any of the cities of Indiana. By telephoning or telegraphing to the nearest city or large town it is possible to secure antitoxin in any community in Indiana within a few hours. There is, therefore, no excuse for not using this life-saving agent in any case of diphtheria or suspected diphtheria. It should also be remembered that antitoxin is a preventive measure when administered to those who have been exposed to diphtheria. The intelligent use of antitoxin should practically do away with our reports of deaths from diphtheria.

IT is the unusual and new things which attract attention and are of interest. Therefore, we hope we may have more of the new and unusual things related to the practice of medicine and surgery for report in *THE JOURNAL*. Interesting case reports, descriptions of new methods of treatment or operation, descriptions of new instruments or appliances and criticisms of prevailing methods are all solicited for publication. The average so-called "original article" is nothing more than a compilation, often times copied word for word from some well-known text-book, though a comprehensive review of the literature on a certain subject and conclusions drawn therefrom may be considered an original article worthy of the attention of any thoughtful student, and, therefore, entitled to a place in medical journals. But the man who really can say something which is worth space in a progressive medical journal is in the minority and often times, through his own modesty or other reason depending upon himself, he is not heard. It is such men *THE JOURNAL* would like to hear from.

AN AGREEABLE and smooth-talking woman is introducing to the medical profession and public of Indiana a preparation styled "Peptol," which is reputed to contain "130 food units per ounce—65 pure, highly emulsified vegetable oils and 65 perfectly dextrinized starches and sugars." The remedy is advertised as a health giver and recommended in extravagant terms as a tonic and tissue builder in the treatment of a large number of diseased conditions. On the back of

the circulars which are distributed is the statement "Watch the papers for notice of the Peptol demonstrations to be given this week at the downtown drug stores." The fair detail woman entrusted with the duty of introducing the preparation to the medical profession naively admits that Peptol was once commercialized and extensively advertised in the public press, also that the home of the preparation is Battle Creek, where numerous fake breakfast foods and nostrums owe their origin, but with seeming saint-like candor she solemnly declares that *now* the preparation is to be exploited as an ethical production which physicians will be pleased to recommend to a suffering public long awaiting such a marvelous health-giving remedy. We shall be interested in knowing how much encouragement the medical profession of Indiana will give to this scheme to boost a preparation clearly intended to be advertised and sold like patent medicine, and probably containing as little virtue.

THE treatment of alcohol and drug addictions seems to be a favorite scheme for graft in the medical profession, if we are to believe the reports from certain "jag cure" institutions that claim to secure nearly all their patients from physicians at a specified price per patient. One J. B. Stewart, not unfamiliar to readers of THE JOURNAL, is now writing from Indianapolis to physicians offering to pay \$25 for patients referred and claims to have the only known formula that absolutely cures alcohol and drug addictions. Indiana physicians will do well by themselves and their patients to steer clear of any "jag cure" institution which has to offer a commission for patients referred. Incidentally we desire to say that THE JOURNAL carries the advertising of three sanitariums that make a specialty of treating alcohol and drug addictions. These institutions are owned or controlled by reputable medical men who are members of the state societies in the states in which they live (members of the Indiana State Medical Association in one instance), and we believe that they can be trusted to give patients and physicians due consideration without the necessity of resorting to graft. If we thought they were running institutions on the order of the one run by Mr. Stewart heretofore mentioned we would cancel their advertising contracts at once. Ethical institutions, presided over by not only ethical but competent medical men, deserve and should receive recognition and patronage from the medical profession, and THE JOURNAL carries the advertising announcements of some institutions of that character.

MURINE, a nostrum widely advertised on bill boards and fences and in the daily press as a positive cure for sore eyes, and its promoters, the Murine Eye Remedy Company, have been exposed in *The Journal of the American Medical Association*, November 7. An analysis of Murine shows that it is essentially an aqueous solution of borax, 12 grains to the fluid ounce, and contains a trace of golden seal. Its actual cost to the promoters should not be to exceed 5 cents a gallon, though the retail price to the public is \$1 an ounce. During the Chicago session of the American Medical Association, the promoters of this nostrum attempted to work the medical profession and lead the public to believe that Murine was accepted as an exhibit at the A. M. A. session. The daily papers of Chicago contained an invitation for the entire medical profession to visit the Murine exhibit at the Murine offices, or send addressed cards to insure delivery of samples of Murine. The announcement concluded with this misleading statement: "The demand at the Exhibition Hall was so great as to render this notice necessary." Perhaps a few gullible doctors swallowed this bait, hook and all, for in advertising to the general public the promoters of Murine enlarge upon the approval which physicians accord their preparation. In addition to their Murine interests, the Doctors McFerrick (James B. and George W.) are presumably the whole faculty in a school of spectacle fitters operating under the name of the "Northern Illinois College of Ophthalmology and Otology." This institution confers no fewer than seven degrees, and the catalogue emphasizes the statement that the diplomas "frame handsomely." The success of this combined nostrum business and college lies in humbugging and deluding the innocent, and it is said that the promoters have grown rich from the practice.

IF THE JOURNAL fails to reach one of our subscribers we generally hear of it very promptly, and usually with a suggestion that the name has been taken from the mailing list by mistake. We wish to say that whenever we receive the dues, which include a subscription to THE JOURNAL, from any member of the Association, we at once enter that member's name on our subscription list, and it remains there until the end of the fiscal year. As the journals are all addressed by machinery, we are positive that every subscriber has a journal addressed to him each month. It should be remembered, however, that occasionally a journal will go astray in the mails, and each month a very few journals have the ad-

dresses rubbed off while passing through the mails, and until we hear from members who have failed to receive their journals we are unable to remedy the trouble by sending duplicates. We invite all members to write us concerning failure to secure *THE JOURNAL*, as also concerning incorrectness or change of address. It is as much to our interest to have a correct mailing list and avoid errors as it is to the interest of other members of the Association, for, while we are pleased to make corrections and supply duplicate journals to replace those miscarried or lost in the mails, every time we do this it means extra work and extra expense, both of which we try not to have unnecessarily. Next month the dues for 1909 become payable, and every member of the Association who desires to keep his name on the mailing list of *THE JOURNAL* after January 31 should see that his dues are sent in prior to that date. A by-law of the Association provides that the fiscal year shall be from January 1 to December 31, inclusive, and that all assessments become due and payable on January 1 of each year. It also provides that if dues are not paid on or before February 1 membership is forfeited and the name is canceled from the mailing list of *THE JOURNAL*. We desire to remind the members that this by-law is a necessity now that we have *THE JOURNAL*, published at large expense, and the regular mailing of which, according to the postal laws, must be to subscribers only. Furthermore, the one dollar assessment of the Association can and should be paid by any member almost upon demand, and nothing but carelessness should prevent any member from paying his assessment when due. Those who are habitually forgetful or careless about this should attend to the matter at once while it is fresh in the mind. Tie a string around the finger, if no better way offers, to remind you that your Association assessment, including subscription to *THE JOURNAL*, is due and payable in two weeks, but that it will be accepted and credit given *now*. Promptness in this matter will save us all much unnecessary embarrassment, inconvenience and labor.

CORRESPONDENCE

A DAY IN THE VIENNA CLINICS.

(BY A FORT WAYNE PHYSICIAN.)

VIENNA, Nov. 8, 1908.

To the Editor:—The surgical clinics here are at the height of their activity, and material is so abundant that they are especially rich in

quality, and one finds himself lamenting that he can not be in several places at one time. In order to show some of the work that is being done, I will endeavor to briefly describe a sample day's work done with some of the surgeons and pathologists. Beginning in the early morning with

EISELSBERG.—He leads in surgical reputation in Austria (and Germany, too, for that matter, for he was offered the von Bergmann chair in Berlin after von Bergmann's death) and continues his unusual brain surgery. He is able to practically demonstrate the diagnostic value of radiography in locating brain tumors. Case 1.—Craniotomy over left parietal region. Large horseshoe bone flap lifted. Hinge portion of flap excised and flap replaced. Scalp sutured and patient returned to bed for seven days until dural adhesions take place. A second operation will then lift the dura with the bone flap, at which time the tumor will be removed. Case 2.—Craniotomy with removal of cerebellar tumor. The electric bone drill that he uses looks like a miniature "jumping Coulter" plow. The plowshare portion passes under the inner table, while the blade portion is a revolving drill that cuts a clean furrow very rapidly. I was shown this case the day prior to the operation and am promised another examination after his recovery.

ZUCKERKANDL.—There is no surgeon in all Europe who equals Zuckerkandl in perineal prostatectomy, and it is my opinion that he has no superiors in other genitourinary surgery outside of suprapubic prostatectomy. He is using more catgut and not as much silk as the other operators here use. I find him more conservative, and, if possible, even better than he was three years ago. Case 1.—Perineal prostatectomy. Perineum was opened by the extra-urethral route. Prostatic capsule incised. Prostate fixed with screw retractor and enucleated *in toto*. Fascial plains (elevator fascia) sutured back into place. Drainage done entirely through urethra. The prostates after removal look identically like the ones removed *en masse* suprapubically. Case 2.—Nephrolithotomy. Right kidney. Kidney delivered. Opened on long axis upper one-half of kidney. Finger introduced and small stone delivered. Two x-ray pictures, both perfect. Kidney sutured with interrupted catgut, deeply; replaced, and wound closed with drainage. Case 3.—Nephrectomy for suppurative nephritis following nephrolithiasis. Incision made directly through to perinephritic fat. Kidney was markedly adherent and could not be delivered, so he

exsected it from the renal vessels and ureter. The skiagrams show accurately the stone locations compared with the opened kidney. Muscles were apposed and kidney fossa drained with rubber tube and gauze. Case 4.—Carcinoma of bladder invading left trigone. Resection of half of bladder, including left ureter and left trigone. Ureter transplanted to right side. Peritoneal cavity opened and closed during operation. Bladder mucosa brought up and fastened to abdominal wall. A two-way drain introduced and cavity packed with iodoform gauze.

WERTHEIM.—In pan-hysterectomy (abdominal) for carcinoma uteri, Wertheim is inimitable. Case 1.—Showed the operation being done with only the hands used as retractors. After the uterus and adnexa were removed down two inches into the vagina you could see the ureters bridging over the space between the sacroiliac synchondrosis and their insertion into the bladder. Case 2.—Was a removal of both tubes and ovaries (hydro. s.) per vaginam. He enters the peritoneal cavity through the vesico-uterine fold of peritoneum rather than through the Douglas pouch. Wertheim says that he reverses the order that is usually done relative to the abdominal routes, i. e., he prefers the abdominal route in malignant cases and the vaginal in non-malignant cases.

STOERK.—Vienna is admitted to be the center of all the world for gross pathology. Stoerk, who has been an assistant of Weichselbaum's for many years, we have at 4 p. m. in gross pathology (in English). To show the quantity of material, I made a count and found that we had nine bodies represented, showing fifty-nine portions of pathology therefrom. One especially interesting case showed syncytioma when an hysterectomy was done, yet there was metastasis in almost every organ of the body, especially in the lungs. Another was a brain abscess due to the spirillum leptothrix (one of four known cases). There are many cases of brain abscesses due to middle-ear infection that are successfully operated upon.

The day closes with an address in the evening by FINGER on "The *Spirochete Pallida* in Its Relation to Syphilitic Inoculation" before the American Medical (branch) Society here. He made demonstrations in many ways, the *dark field* being one of the most perfect ways of seeing the pallida spirochete. Finger's life-long investigation of syphilitic inoculation, autoinoculation during different stages, animal (ape)

inoculation and immunization period, made his lecture so authoritative that one readily sees in him a greatness that has resulted from untiring investigation. CHARLES E. BARNETT, M.D.

DEATHS

ROLLA W. BULA, M.D., Philadelphia University of Medicine and Surgery, 1870; died at his home in Indianapolis, November 10, a year after a surgical operation, aged 60.

JOHN HARPER, M.D., Cincinnati College of Medicine and Surgery, 1863; died at his home in Mount Vernon, Ind., October 19, from cerebral hemorrhage, aged 82.

THOMAS J. RICHARDS, M.D., Jefferson Medical College, Philadelphia, 1868; a veteran of the Civil War; died at his home in Clear Springs, Ind., October 17, from paralysis, aged 86.

WILLIAM R. SCHOONOVER, M.D., Kentucky School of Medicine, Louisville, 1876; of Warsaw, Ind.; physician to the Winona Assembly; died in the Northern Indiana State Hospital for the Insane, Longcliff, Logansport, November 12, aged 68.

WILLIAM FIELD WOOD, M.D., Queen's University, Kingston, Ontario, 1891; a member of the American Medical Association; formerly president of the Mishawaka Physicians' Club; died at his home in Mishawaka, October 20, from tuberculosis, aged 41.

DR. JOSEPH WEEKS died at his home in Mechanicsburg Nov. 14, 1908. He was born in Orange County, New York, Sept. 17, 1820, and began the practice of medicine in 1847. He came to Mechanicsburg in 1856, and resided there until his death.

JACOB D. HAYNIE, M.D., Cincinnati College of Medicine and Surgery, 1878; chief of the medical staff of the Richmond division of the Pennsylvania System; died at his home in Richmond, Ind., October 29, from the effects of a fall down a stairway, aged 56.

JOHN E. HARRIS, M.D., Louisville Medical College, 1870; a member of the Indiana State

Medical Association, and a member of the board of pension examining surgeons; for two years city editor of the Louisville *Evening Post*; died at his home in Bloomington, Ind., Nov. 5, 1908, aged 64.

DR. C. M. GRAVIS, of Martinsville, died Nov. 10, 1908. Dr. Gravis was born in Ohio, and at the outbreak of the Civil War entered the service, serving throughout the war. He was at one time a prisoner at Libby and Andersonville. He practiced medicine in Martinsville for twenty-five years.

DR. ELIHU T. MENDENHALL, of Newcastle, died Nov. 14, 1908, after an illness of five weeks, aged 64 years. He was a prominent physician of Henry County, and had practiced there for thirty-four years. He graduated from the Ohio Medical College in 1877. He was a charter member of the G. A. R. Post. For many years he was secretary of the Pension Board, and also county health officer. He was born in Montgomery County, Jan. 25, 1844. At the time of his death he was a member of the Henry County Medical Society and the Indiana State Medical Association.

PERSONALS

DR. R. H. ROSS has removed from Kokomo to Galveston.

DR. J. F. POWELL, of Greentown, has located in Garrett.

DR. S. D. BLACK, of Brazil, has moved to Los Angeles, Cal.

DR. MARION GOSS, of Rockville, is reported to be seriously ill.

DR. A. T. GRIFFIN, of Brazil, has located in southern Illinois.

DR. A. F. SMITH, of Waupecong, is now practicing in Kokomo.

DR. J. H. ROSS, of Kokomo, is spending the winter in Winter Haven, Fla.

DR. JOSEPHINE M. MITCHELL, of Lafayette, has returned from a trip abroad.

DR. R. Q. TAVINER, of Huntington, was elected coroner of Huntington County.

DR. F. R. MORGAN, who located in Kokomo a few months ago, has removed to Anarga, Ill.

DR. JAMES K. MOSS, of Ashboro, who has been suffering from typhoid fever, has recovered.

DR. JOHN M. KITCHEN, Indianapolis, is ill in the Methodist Hospital with cerebral hemorrhage.

DR. J. R. HUNTER, of Huntington, has been appointed chief surgeon for the C. B. & C. Railroad.

DR. CHARLES E. STONE, of Shoals, has been appointed secretary of the Martin County Board of Health.

DR. APOLLOS F. PHILLIPS, Corunna, has returned from Europe and opened up for practice in Fort Wayne.

DR. CHARLES S. MACK, La Porte, coroner of La Porte County, has announced his intention of resigning and entering the ministry.

DR. R. J. CLARK, of Monticello, a member of the White County Medical Society, is seriously ill, suffering from malignant prostate.

DR. D. W. STEVENSON, of Richmond, counselor for the Sixth District, is taking a short postgraduate course in the eastern cities.

DR. WALLACE GRAYSTON, formerly of Marion, has located in Huntington and has announced that he will limit his practice to surgery only.

DR. HARRY C. SHARP, Jeffersonville, for eleven years physician at the state reformatory, has retired and has been succeeded by Dr. Harry P. Smith, Kokomo.

DR. E. B. MUMFORD, Indianapolis, has been appointed special physician of the city board of health to supervise the inspection of contagious and infectious diseases.

DR. HELENE KNABE, Indianapolis, head of the state bacteriological laboratory, has resigned, taking effect December 1. Dr. J. P. Simmonds, St. Louis, is announced as Dr. Knabe's successor.

DR. CHARLES A. O'BRIEN, Fillmore, has resigned as physician and coroner of Putnam County. Dr. Walter R. Hutcheson, Greencastle, has been appointed to fill the unexpired term as county physician.

AT THE annual meeting of the DeKalb County Teachers' Association, held November 28, Dr. C. S. Stewart, of Auburn, delivered an address on the subject "The Examination and Care of the Eyes of School Children."

DR. HENRY HERR, a member of the Daviess County Medical Society, and local surgeon for the B. & O. S. W. Railroad, of Washington, Ind., was united in marriage with Miss Lillian Stone, also of Washington, October 27.

DR. CHARLES N. COMBS is taking the Pasteur treatment in Indianapolis, as the result of being exposed while administering chloroform intermittently to control the convulsions of a patient suffering with hydrophobia whom he had in charge.

THE members of the Committee on Legislation of the Fifth District Medical Society secured, during the recent campaign, pledges from all candidates from Brazil County to support all measures upholding the efficiency of our boards of health and the continued non-partisan management of all the state institutions.

NEWS, NOTES AND COMMENTS

THE Fort Wayne Hospital Training School of Nurses graduated a class of six on November 25.

THE midwinter meeting of the Northern Tri-State Medical Association will be held at Ann Arbor on Tuesday, Jan. 12, 1909.

DR. FREDERIC BRUSH, of Boston, has been appointed superintendent of the New York Postgraduate Medical School and Hospital. Before assuming the position he will devote some time to a study of postgraduate instruction and hospital administration in the various American medical centers.

DR. NICHOLS, late of Andrews, Ind., on November 18, through his attorneys, pleaded guilty to the charge of practicing medicine without a license. He was fined in the sum of \$25 and costs. This charge was made against him by the Huntington County Medical Society.

THE Caroline R. Sharp Club, a philanthropic organization of some of Kokomo's best women, entertained in honor of the Kokomo Academy of Medicine at the home of Mr. and Mrs. J. M. Leach on the evening of November 30. It was a notable social event; besides a large number of physicians, several members of the legal profession and the clergy were present. A program of music and short talks on "The Model Wife" and "The Model Husband" enlivened the occasion.

THE Vigo County Medical Society has been carrying out the postgraduate course of study and is now well along in the second year's work. In addition to this, we have had some extra work which has been very interesting. One evening Dr. Schell introduced a guessing contest. He brought up to the meeting four cases of incipient heart lesions. Each member present made a physical examination of the patient and wrote his diagnosis on slips of paper. Afterward these slips were collected, read and compared by Dr. Schell.

THE agents of the Board of State Charities have in the past year been very successful in securing a large number of good homes for dependent children who are public wards. There are still a large number of desirable children available for placing in suitable homes. Doubtless there are many families that would make a home for a child. An important part of the board's work is to bring the homeless child and the childless home together. The board solicits the cooperation of all who are interested in securing proper homes in families for children. For further information address THE BOARD OF STATE CHARITIES, State House, Indianapolis, Ind.

"TWENTY YEARS IN PERSIA" is the title of an interesting volume by Dr. John G. Wishard, director of the American Presbyterian Hospital at Teheran. Dr. Wishard is well known in Indiana—which he still calls home—and his clear, straightforward narrative of personal experiences in the land of which he writes will have a double interest to the Hoosier readers on this account. The author has enjoyed exceptional advantages in the way of gaining information for his work, as his position at the head of the hospital has put him in very close touch with the highest authorities in Persia, as well as with the people. Dr. Wishard is a brother of Dr. W. N. Wishard, President of the Council of the State Medical Association, and a son of Dr. W. H. Wishard.

COMPLIMENTARY to Dr. L. A. Simmons, on Wednesday, November 11, the eve of his departure for permanent residence in Florida, the Howard County Medical Society gave a dinner in the private dining-room of the St. Francis Hotel. While given in honor of one of the oldest members of the society, for whose departure general regret was expressed, the dinner proved an enjoyable affair and one of good-fellowship, probably in that respect the most profitable meeting of the year. The sole occurrence to mar the occasion was the hasty adjournment caused by the calling of Dr. Simmons to his home because of serious illness of a member of his family. Resolutions commendatory of Dr. Simmons, introduced by Dr. J. O. Garr, were adopted.

THE annual banquet and election of officers of the Huntington County Medical Society will

take place December 17. Prior to the banquet an opening and public meeting will be held at the Court House, at which time Dr. Charles H. McCully, of Logansport, councilor of the district and vice-president of the Indiana State Medical Association, will deliver an address entitled "Twentieth Century Bondage." He will treat the subject in a way that will interest the public and profession alike. A general invitation to the meeting has been extended to the public and a special effort has been made to obtain the attendance of the city council and other public officers. The list of the speakers and the subjects assigned are: "The Profession as Seen by Others"—*The Minister*, Prof. W. P. Hart; *The Teacher*, Rev. W. H. Dennison; *The Doctor*, Hon. S. E. Cook; *The Lawyer*, Dr. R. F. Frost. Mr. Hugh Butler, editor of the *Huntington Herald*; Mr. O. W. Whitelock, editor of the *Huntington News-Democrat*, and Mr. Thad. Butler, editor of the *Huntington Morning Times*, will speak on "The Press in Relation to the Medical Profession."

SOCIETY PROCEEDINGS

ALLEN COUNTY.

FORT WAYNE MEDICAL SOCIETY

(Meeting of Oct. 6, 1908.)

Society met in regular session at St. Joseph Hospital, with 33 members present. Meeting called to order by secretary, in the absence of president and vice-president. Minutes of previous meeting read and approved.

Dr. Kane presented a mounted specimen of extra-uterine pregnancy. Fetus five or six weeks old. Glycerin gelatin mount.

Paramyoclonus Multiplex.—Case exhibited by Dr. Kane. He said that only sixty-eight cases are found in literature. Patient, young lady, age 23, born in United States, third child of parents in good mental and physical health at the time of her birth. Had typhoid fever three years ago, with complete recovery. About six months later she was awakened at night by violent convulsive movements of the shoulder muscles of both sides. These movements were clonic in character, at the rate of about 100 a minute, and almost ceased when patient's attention was attracted. No regular system involved. This first attack has been followed by others at irregular intervals. Subsequent seizures have involved the muscles of the thigh down to the knee, particularly the quadriceps extensors. The facial muscles have never been involved. The convulsive seizures last from a few minutes to several hours, and vary from one to a dozen a day. During the past summer she has been quite free from the attacks, but during September they returned. The examination of this case was carefully made because of the liability of confounding

this condition with hysteria; but have failed absolutely to demonstrate any of the stigmata of the latter condition.

The only history having any bearing on the case is that the mother has had nervous prostration. Father died of typhoid fever. At the time of examination patient weighed 97 pounds, temperature 98.2, pulse 100, respiration 18, blood pressure 110 m.m., hemoglobin 60 per cent., reds 4,000,000, whites 14,000. Skin and deep tendon reflexes are plus. Reaction to the normal electrical formula. No inversion of the color fields could be demonstrated, except a slight contraction of the left, but Dr. Bulson, who made the examination, stated that no importance could be attached to this in the absence of other stigmata of hysteria. Attention was first called to this condition by Friedrich in 1881. The disease is characterized by the clonic muscular contractions occurring mostly in the body and limbs, rarely in the facial muscles. The contractions are short, sharp, very rapid, unsystematized, may occur on both sides of the body, so do not occur synchronously or rhythmically, may be disseminated or localized, and may involve a single muscle or a whole group of muscles. The muscles most often involved are the supinator longus, biceps, trapezius, quadriceps femoris, semitendinosus. Active movements are not at all hindered, but seem rather to control the spasm, the opposite is true of the emotions. The twitchings are lessened if attention is diverted. The tendon phenomena are generally increased. In many cases trauma, fright or an infectious disease precede the onset. Unverricht has described a particular form of the disease, characterized by its combination with epilepsy. Moebius and Strümpell have doubted the independence of this condition and are inclined to regard it as a form of hysteria, but, as has been stated, this case has failed to show stigmata of the latter condition. Patient was presented for inspection.

Dr. M. I. Rosenthal reported several cases and presented a number of specimens.

Specimen 1. Ectopic gestation with fetus five or six weeks old in tube. This specimen was removed from a woman who had been well except for the fact that there had been atypical menstruation. An examination revealed a tumor in the cul-de-sac, and diagnosis of ectopic gestation was made, and patient brought to the hospital and operated on immediately. There was no bleeding, and no blood in the belly. Dr. Rosenthal said that these cases frequently die of shock, and not from hemorrhage. The mortality is due to the infection accompanying this condition. Do not wash the belly in these cases, but wipe out the blood clots, and if the shock is marked pour salt solution into the belly.

Specimen 2. Fibroid from uterus. This case was also pregnant about four months, though she had menstruated slightly between times. The tumor was causing pressure on the bladder. On examination tumor was found in front of the uterus and to the left. It is not good practice to make a forcible examination when liable to find ectopic gestation. Diagnosis was either ectopic gestation or pre-existing tumor, but on operation it proved to be a subserous fibroid. This would have afforded obstruction to delivery. The peritoneum was split and the tumor shelled out. It is a question in these cases as to whether it is wiser to remove or to leave and make a Cesarean section

later. Following the operation there were no uterine contractions, and no indications of abortion.

Specimen 3. Growth from finger. This growth was quite dark, and still shows some black. This was removed from the finger of a lady, age 18 years. There was a question as to its malignancy. Had it been malignant, amputation of even the arm would have been useless. The tumor was movable over the tendons, and was a fibroma molluscum.

Dr. Rosenthal spoke on some of the results to be obtained in operations for carcinoma. (1) Carcinoma of breast. He removed the entire breast and pectoral muscles, and other end of clavicle. He took off, also, a gland from vein about the size of a bean. She has been practically well since, the operation having been done four or five years ago. This shows that this little gland was the last, or was inflammatory in its nature. She had a large metastatic growth under arm. She has also had recurrence or another carcinomatous nodule over one of her ribs, this was removed in Chicago, and is now well.

Dr. Rosenthal also reported a case of operation on advanced carcinoma of the uterus in an old lady, who is now doing nicely after three years, and a case of multiple fibroma of the uterus, which was removed on account of hemorrhage and pressure. There is a tendency to myoearditis in these cases of multiple fibroma of the uterus.

Dr. Rosenthal presented a case of cholelithiasis, in a man suffering from biliary colic. This case had been operated and gall stones removed, with drain in place. He prefers that these cases drain four or five weeks rather than close prematurely. He makes it a habit to sew the tube into the gall bladder. Old stones are a menace because of mechanical effect, cholemia inflammation and absorption of pus. There is also danger of rupture, and on account of secondary effect as producing or tending to produce carcinomatous degeneration in immediate and neighboring organs. As to recurrence of gall stones after operation, Dr. Rosenthal said that if you get all the stones they will not recur. The only case in which he had a return he feels quite certain that one stone was left.

Dr. Rosenthal reported a case of a woman suffering from biliary colic, who was operated on about five weeks ago, fifty-eight stones being removed. The sinus is expected to close in about another week. The danger of gall stone operations is about the same as ordinary appendix operations if seen early. The presence of considerable pus in gall bladder or stone in common duct adds to the danger. The common duct is about two inches long. In case the stone is impacted in the common duct he believes it is less dangerous to open the duodenum.

Dr. Rosenthal reported several appendix cases, as follows:

1. This case on examination per vaginam showed pelvic abscess. This was opened and drained, and two days later she was operated and appendix removed.

2. Man 50 years of age, had an attack of appendicitis lasting over one week. Operated.

3. Every evidence of intestinal obstruction manifested; abdomen markedly distended, and patient vomiting fecal matter. On operation found bands of adhesions, and appendix was diminutive, but gut so bound down with adhesions that same could not be cleared. An intestinal anastomosis with Murphy button was made, and patient is expected to recover.

Dr. Blosser presented a case, a young lady, whose scalp was torn off April 9th. Attempts were made to place the scalp on the head again, but they were futile. Skin grafting was then tried, and ethyl chlorid spray used as anesthesia in removing grafts from her body. The grafts from the patient herself were the only ones that took, and Dr. Blosser believes that this was due to patient's immunity to infection present.

Dr. Porter reported a case of typhoid perforation, with operation, and said that the case is progressing nicely, and is expected to recover.

In opening the discussion Dr. B. P. Weaver said that only 5 per cent. of unopened cases of ectopic gestation die from hemorrhage per se.

Referring to the case of tumor removed from the little finger, Dr. Porter said that the fact that it was movable over underlying tissues does not prove that it was not malignant. He said the fact is that these melanosarcomata are not attached for a long time, and sometimes never attached. These tumors for a long time have potentiality of malignancy without manifesting it, and after a long time suddenly show malignant tendency. He believes the microscope should be used.

Speaking on fibroma in pregnancy, Dr. Porter said that it is quite right to remove fibroid from the pregnant uterus. He referred to a case in which he had removed a fibroid from pregnant uterus, and the case went on to term, and patient has since given birth to another child. On the question of the growth of fibroids in presence of pregnancy he said that some grow and some do not grow, still others seem to grow but do not. The rapid increase in the size of the uterus lifts them up so that they are more noticeable. Any fibroid large enough to attract the attention of the patient should be removed.

With reference to the case of appendicitis where anastomosis of the colon was made, Dr. Porter said he believed that the abscess originated from rudimentary appendix, and that this appendix had been damaged by inflammation. He also spoke on the danger of plugging of the button in cases where it was used in the colon, and said that the stools should be kept liquid.

Concerning these cases of ectopic gestation, Dr. Porter said that Dr. Rosenthal is to be congratulated on making the diagnosis of ectopic gestation before rupture or abortion. These cases in which this condition occurs, as a rule, have had a diseased tube, and the fact that the tube is diseased and pregnancy present is sufficient cause for removal.

Dr. Rosenthal said, in closing, that the appendix case in which anastomosis was made was *in extremis*, and therefore a more deliberate anastomosis was not made. It was a case of appendicitis obliterans. He also said that the tumor removed from the finger was fibroma.

A vote of thanks was given the Sisters for the luncheon prepared.

Adjourned.

J. C. WALLACE, Secretary.

(Meeting of Oct. 13, 1908.)

Society met in regular session in the assembly room, with sixteen members present.

Peritonitis from the Standpoint of the Anesthetist was the title of a paper by Dr. J. H. Gilpin, in which he said that a patient with acute peritonitis

requires much more skill to anesthetize correctly, and is in much greater danger from the anesthetic than one with an uncompensated heart lesion. One of the first and most important rules to follow is to use as little anesthetic, drop by drop, as is necessary to produce complete anesthesia, and no more. To a large extent the patient is more or less anesthetized by the toxins of his peritonitis and consequently needs much less ether than with most other conditions. In fact, diffuse peritonitis and acute pus formation in the abdomen can be diagnosed almost without exception by the manner in which they take the anesthetic. Not all deaths are due solely to the peritonitis or the operation, but some blame must be laid to the anesthetic. Both ether and chloroform have exactly the same effects; both depress the heart, although chloroform more so than ether, and it is to this that death is due, and not to paralysis of respiration. Acute peritonitis is the most dangerous and difficult condition for which an anesthetic is given, and the surgeon should inform the anesthetist when such a condition is present.

In discussing this paper, Dr. Van Buskirk said that he had had more experience with chloroform, and with this you are more liable to notice the tongue dropping back into the pharynx and giving trouble. He said that the surgeon is often to blame for long anesthetics, as he does not get to work promptly, nor does he work as rapidly at times as he should.

Dr. Weaver said that in cases of acute peritonitis the plan of attack should be, in the vast majority of cases, to get in and do what is to be done and then get out as rapidly as possible. He advocates that the scrubbing-up process of the patient be started as early as possible, thereby saving valuable time. Just enough, and not too much, anesthetic should be used. The first consideration should be the patient and then the convenience of the surgeon and the anesthetist.

Dr. Beall said that he believed that chloroform is contraindicated in acute diffuse peritonitis on account of the damage it does to the organs. Ordinarily these cases are pale and not much cyanosed, as shown in color of skin, but when the surgeon makes his incision and the blood flows you can readily see that they are affected by the anesthetic. He disagrees with the statement that ether is a depressant. Before the belly is opened the pulse is good, but after the belly is opened the pulse is not so good. The patient should be thoroughly asleep, for the reason that when not asleep the reflex action caused by opening the abdomen will be more than if thoroughly asleep.

Dr. Gilpin said, in closing, that if enough ether is given you will get fall in blood pressure. He also said that both ether and chloroform are depressants.

Intestinal Obstruction Caused by Meckel's Diverticulum.—Paper read by Dr. Allen Hamilton. Patient, boy, aged 6 years, admitted to Hope Hospital Nov. 24, 1907. Three days before admission child complained of pain in abdomen, which became rapidly worse and was severe ever since; vomiting began, first food, then bile, and later fecal matter; there was absolute constipation, neither catharsis nor enema bringing away gas or feces. Child was in collapse and almost moribund, temperature 98, pulse 115 and very weak, abdomen markedly distended and tender chiefly in region of umbilicus. Case appeared hopeless, but, as death was rapidly approaching, operation was de-

aided upon. On opening the abdomen I found the distended gut led down to the pelvis, where, within a few inches of the ileocecal valve, was an obstruction. A Meckel's diverticulum was present, the tip of which was attached to the mesentery of the ileum surrounding a loop of small intestine. Both diverticulum and ileum adjoining were gangrenous. The diverticulum was removed, and a Murphy button put in.

Meckel's diverticulum is the remains of the vitelline or omphalo-mesenteric duct that in the early weeks of fetal life connects the intestine with the umbilical vesicle. Normally the abdominal wall is closed by the sixth week of intrauterine life, and this duct atrophies, only a cord being left connecting the gut with the umbilicus; as the fetus develops this, too, disappears and the intestine is left free. In one human subject in fifty, or thereabouts, the duct fails to become obliterated and remains present in a more or less incomplete condition. As an exciting cause, trauma plays a part, as well as do digestive disturbances, flatulency and overeating. The symptoms are those of any obstruction, later that of peritonitis, but it is remarkable in how many cases appendicitis is closely simulated.

In the discussion, Dr. Weaver stated that he believed the diverticulum should be amputated when at all possible and future complications thus avoided.

Dr. Mouser stated that he had seen four cases; three cases were caused by bands, the other formed an obstruction by cyst. He said this condition is a physical stigmata and indicates that the child is not finished.

Dr. Van Buskirk said he had seen two cases post-mortem, one where the diverticulum had detached itself from the intestine and formed a small cyst in conjunction with the umbilicus.

In closing, Dr. Hamilton said that there is no question but that the diverticulum should be removed if the condition of the patient warrants such a procedure.

Dr. K. K. Wheelock gave a talk on his observations while in Boston doing the clinics there. He said it was a very good field, and advised members to pay Boston a visit for the purpose of clinical investigation.

Dr. W. W. Carey gave a short talk on his experiences in Boston while in attendance on clinics there. He also spoke of his observation while attending the Tuberculosis Congress.

(Meeting of Oct. 20, 1908.)

The society met in the assembly room, with thirty-five members present. Minutes of two previous meetings read and approved.

Postoperative Hernia.—Dr. M. F. Porter reported a case which he had operated for postoperative hernia, following operation with drainage, and also operated for removal of appendix as well. On opening the abdomen he found the lower abdomen a mass of adhesions, and discovered that he had to deal with femoral and inguinal hernia. The intestines and omentum were bulging out. In closing the opening, he lifted up Poupart's ligament and reached under, grasping the internal oblique, bringing it down under Poupart's ligament, and then brought down the external oblique. There was no tension, inasmuch as there was no strength in these muscles. He did not break up the adhesions, because they were not causing any trouble. Dr. Porter wished to call attention to the procedure in this case of pulling down the muscles

under Poupart's ligament and pulling the muscles over the inguinal and crural rings at the same time.

Syphilis of the Nervous System was the title of a paper by Dr. G. Van Sweringen, in which he considered early involvement of the nervous system in syphilis; the frequency of syphilis of the brain and cord; etiology of nervous syphilis; the pathological changes in early syphilis, to which can be attributed many of the vague nervous symptoms; the similarity of tabes dorsalis, paresis and cerebrospinal syphilis, with the pathological changes in each, showing the reason for failure of antispecific treatment in tabes and paresis, and the good results of this treatment in cerebrospinal syphilis; a case history of the last-named disease, illustrating the result of treatment. He made a plea for early diagnosis of nervous syphilis in order to get the best result from antisyphilitic treatment, i. e., before any destruction of nerve tissue has taken place and most of the symptoms are due to pressure, and the institution of large doses of potassium iodid and mercury until symptoms are controlled, then tonic doses of mercury.

Dr. Beall contributed a pathological specimen of syphilitic arteritis.

Dr. Porter opened the discussion by saying that the practical point is that after a gumma has produced changes in the tissues the trouble cannot all be cleared up. K. I. will clear certain lesions, but the results of these lesions may be permanent. He had one case of chancre of the lip which was not placed on treatment until diagnosis was certain. After a length of time the chancre got well, and in about six weeks a facial palsy and nervous manifestations presented. Patient was put on K. I. and Hg. and after about two years of this treatment he recovered.

Dr. Rhamy said that syphilitic induration of the lung shows usual picture of fibroid degeneration.

Dr. Gilpin said that it is hardly fair to state that all cases of paresis are due to syphilis.

Dr. B. Van Sweringen reported a case of paraplegia which was rather sudden in manifestation. The patient was put on very active antisyphilitic treatment, with no results for a couple of months. The patient ceased treatment, and has recovered in a great measure. Dr. Patrick, of Chicago, diagnosed this case as one of rapidly developing tabes. This patient is now able to do work as rural mail carrier.

Dr. Morgan said some years ago he reported a case as having got well under K. I. This patient did well for a year, but now he has returned to Fort Wayne to die. It is now about three years since the patient was apparently well.

Dr. Carl Schilling said that about a year and a half ago he was called to see a case with symptoms of hemiplegia. This patient was put on active antisyphilitic treatment. A short time ago he was called to see this case, which was suffering from severe pain in abdomen, which grew more severe, followed by death in a few days. Postmortem showed perforating ulcer of the duodenum, also gummata in kidneys, liver and pancreas.

Dr. Weaver spoke on the question of trauma bringing out syphilitic tendency. He spoke of the case of a man who fell, and eleven days later there was inability to urinate, and later loss of control of bowels, also paraplegia. He developed a hematuria, and was put on K. I., and is now taking 90 grains t. i. d. He is now able to control bowels and can walk. Patient has been on antisyphilitic treatment three months.

Dr. Weaver moved that this paper of Dr. Garrett Van Sweringen be referred to the state society. Carried.

Dr. W. D. Calvin gave a further report on the case of Mr. L., shown here some time ago, in which there was incoordination, spastic gait and local anesthesia. He was put on K. I., 150 grains, and Dr. Calvin has lately received a letter from this man, written by himself, showing that this was a case of syphilis of the nervous system.

Dr. Havice said these cases should be followed up and treated and they would get along better.

Discussion was closed by Dr. G. Van Sweringen.

Gastric Trouble in Different Diseases was the title of a paper by Dr. A. E. Fauve, in which he said that hunger is the result of general cellular work and the demand of material for reconstruction, while appetite is the setting in action of the digestive forces, mostly gastric. As diseases in which the appetite was affected he named gripe, influenza, malarial fever, tuberculosis with high temperature, septicemia and typhoid fever. In high temperature, as we find in septicemia, especially when it lasts several weeks, we often find the separation of soluble ferments and hydrochloric acid. In general the percentage of hydrochloric acid lowers gradually with the elevation of temperature. This diminution is especially more sensitive in infectious fevers, as we find it in pneumonia, typhoid fever, septicemia and articular rheumatism. In pernicious anemia the gastric secretion diminishes slowly; if we examine the gastric contents after a test meal we do not find any hydrochloric acid nor soluble ferments, but only a mucous secretion. In those cases the gastric digestion is absent, and the intestinal digestion diminishes gradually until death takes place. The heart function plays an important rôle in the digestive process. In patients suffering from cardiac affections you will find with all the dietetic precautions you may take the gastrointestinal digestion will be gravely compromised by the effect of the myocarditis. The venous stasis of the gastric mucosa will suffice to diminish the secretion of the gastric juice, while the mucous secretion increases; the same symptoms take place that we find in chronic gastritis, the gastric digestion will be retarded, and all stomachic medication will be useless. In this class of cases a cardiac remedy, such as digitalis, will be very effective if employed in time. Certain skin diseases if they are not caused by digestive troubles are kept up or exaggerated by them, and under the influence of a better gastrointestinal digestion we see these skin affections diminish and even disappear.

Paper was discussed by Dr. B. Van Sweringen.

Adjourned.

J. C. WALLACE, Secretary.

(Meeting of Nov. 3, 1908.)

Society met in regular session in the Assembly room with twenty-one members present. Minutes of previous meeting read and approved.

Abscess of Frontal Lobe of Cerebrum.—Case report by Dr. M. F. Porter. Patient referred by Dr. Grayton. The patient was brought in about one week ago, with abscess of frontal sinus. A sinus had formed above the eye from which a piece of bone had been removed about the size of the end of the finger. Patient complained of pain in the back of the head and neck. Frontal sinus was opened in the usual way and cleaned out, and drainage established through nose and eyebrow, but the pain in back of head con-

tinued. For the last week has had practically normal temperature. In consultation Dr. McCaskey agreed with diagnosis of meningitis, although the only evidence of this condition was a little sluggishness of pupil, myosis and nystagmus. On November 3 patient was in semi-comatose condition, pulse 140, respiration 40 to 50. Exploration was advised, and an opening made in the frontal sinus. Pus was found to come from the upper outer angle. A closer examination revealed that the posterior wall of the sinus was gone and granulation tissue bulged through. An opening through this revealed an abscess in the frontal lobe of the cerebrum, which contained about an ounce of pus. This abscess is now draining through the frontal sinus. Whether this procedure will accomplish the desired results depends on whether thrombophlebitis is present. (Patient died eighteen hours after operation.)

Dr. S. H. Havice reported two cases of ocular disturbance following the use of tuberculin in the eye for diagnostic purposes.

Opening the discussion, Dr. Chas. G. Beall said that it is generally admitted at the present time that we do have some bad results from the use of the tuberculin test. It has been demonstrated that anything stronger than a 1 per cent. solution is dangerous. Both of these cases of Dr. Havice have interstitial keratitis, resulting, no doubt, from an old syphilitic lesion which has been irritated by the tuberculin. Dr. Beall does not think that Koch's old tuberculin should be used at all, because its strength is not exactly known. The precipitated tuberculin should be used. The test should not be repeated in the same eye, for the reason that there is a hypersensitiveness produced.

Dr. Wilking asked Dr. Havice if by diseased eyes he included refractive errors as well as inflammatory troubles.

Dr. W. W. Carey reported having heard at the Tuberculosis Congress at Washington a report by a man who had used the tuberculin in the eye in 800 cases and came to the conclusion that nothing was gained by it.

Dr. McOscar said that we do not know what changes have taken place in the old serums, therefore only fresh products should be used.

Dr. Weaver stated that the solution should be a glycerin free product. The question arises, what is a normal eye, and does the general practitioner know one when he sees it?

Dr. L. T. Rawles said he had had some bad results. He instilled a ½ per cent. solution in the eye of a child 14 years of age, no reaction resulting. In fifteen days he again instilled a 1 per cent. solution in the other eye, which caused a violent reaction in both eyes.

Dr. Havice, in closing, said that the one case had uleero vascular keratitis. He also said that an eye that has simply a refractive error is practically a normal eye. He said that a drop of tuberculin in an eye did not produce a positive diagnosis.

Dr. W. D. Calvin suggested the advisability of a physicians' club, and physicians' building, and asked that a motion be made that a committee be appointed to look the matter up and report to the society as to the advisability, plans, etc., of building to be built and owned by physicians for meeting place, to hold library, museum, social rooms, etc.

Dr. McOscar made a motion that a committee of five be appointed, Dr. W. D. Calvin being chairman, to attend to this matter and report to the society. Motion carried.

Dr. B. P. Weaver, chairman of the committee appointed to review papers on collections, fees, etc., reported as follows. We recommend that:

1. (a) A common collector be retained in the form of a reputable law firm for all accounts placed for collection. (b) Such collector be required to keep a list of delinquents, to be revised at certain frequent intervals, and a copy of such list be furnished each member of the society.

2. Owing to increased cost of living, equipment, and cost of securing a medical education, that medical fees be maintained at a higher standard.

3. A definite percentage of the common collections be appropriated to a fund for the establishment and maintenance of a permanent home for the Allen County Medical Society.

Motion carried to table this matter for two weeks. Adjourned.

J. C. WALLACE, Secretary.

(Meeting of Nov. 10, 1908.)

Society met in regular session at the Lutheran Hospital with thirty members present. Minutes of previous meeting read and approved.

Dr. B. Van Sweringen presented three specimens, as follows: The first was a large fibroma of the uterus, associated with an ovarian cyst the size of a cocoanut. The case was presented because of its rarity, as only a few instances of such association could be found in a rather hasty search.

The second specimen was a prostate removed after the evacuation of a large prostatic abscess which had burst through the capsule and burrowed forward to the perineo-scrotal angle. The question of the advisability of the removal of the prostate under such circumstances was discussed. It was removed in this case because it was thought impossible even in clean cases to prevent the wound from becoming infected, and the infecting organism in this instance did not seem to be very virulent.

The third specimen was an appendix removed the night before, after an illness of seven hours. The patient began to have colic at 2 a. m., which continued at irregular intervals until operated at 6 a. m. When examined at 4 p. m. the pulse was normal and there was no rise in temperature. He had vomited and was suffering considerable pain. Abdominal palpation revealed some tenderness over the appendix but no rigidity. The specimen shows the beginning of a severe inflammation, but no gangrene or perforation, and is presented as a case in which one of the classical symptoms (rigidity) was absent.

Cesarean Section was the title of a paper by Dr. B. Van Sweringen, in which he detailed three cases operated on at the Lutheran Hospital by Drs. Duemling, Porter and himself. The first was made necessary by the presence of adhesions between the uterus and abdominal wall following drainage after the removal of a gangrenous appendix. The second was a case of placenta prævia centralis. The third was a contracted pelvis with a bichial diameter of $2\frac{1}{4}$ inches. All of the mothers made good recoveries and all of the babies are alive.

These cases were made the basis of a plea for the more general employment of the operation, especially

in cases presenting minor degrees of pelvic contraction in whom a high forceps operation becomes necessary. It was argued that the fetal mortality was certainly less in Cesarean section than in high forceps, and that accidents resulting from injuries to the head by the forceps were wanting in the former operation. The maternal mortality and morbidity, it was pointed out, is perhaps less after section than after high forceps. In a woman with the history of one severe disastrous labor the question of Cesarean section should be very carefully considered as she approaches her second confinement. Placenta prævia and abdominal adhesions were also discussed as indications for section.

Present Status of Indications for the Use of the Forceps was the title of a paper by Dr. H. A. Duemling. He said that changes of almost revolutionary character have taken place in obstetric science within the last decade. The trend of these changes have been largely toward minimizing the injury to the maternal parts. To understand the proper use of the forceps, he said it is well to study their action. The forceps as well as any other instrument is an amplification of the hand or fingers fitted to the object in view. The forceps therefore may act in four different ways, viz., tractor, compressor, lever and as a rotator. During traction there is always a certain amount of compression and leverage, and usually more or less rotation. The forceps therefore can not be used as a tractor only, but at the same time becomes a lever. For the least traction, i. e., force, the pull must be in the axis of the parturient canal. From 70 to 80 pounds of tractile force should be considered the limit. Forceps in its action somewhat copies the normal scheme. When applied it compresses the head and by the resistance offered by the structures is in turn moulded to conform with the maternal parts. In other words, when traction is applied, compression begins, and when traction ceases, compression ceases—both as regards forceps or maternal parts. The amount of compression is in relation to the amount of traction. Avoid compression and consequent paralysis of various nerves caused by forceps slipping, by placing your forep blades properly, and do not begin traction until firm hold is secured. When forceps is used as fulcrum it must be understood that the intrinsic usefulness depends entirely upon the fulcrum used. The pendulum movement must not be used without traction. Forceps are dangerous rotators. It is permissible to rotate a head with the forceps and using them as the fulcrum. Too firm a hold on the forceps prevents rotation. If the tractile force, however, is applied close to the lock the head will make a normal rotation.

Indications for the use of forceps may be two fold: Those in the interest of the mother and those in the interest of the child. The most important indication for the use of the forceps is found in actual or relative uterine or abdominal inertia. A fetal heart beat at 100, prolonged for a minute, is a positive indication for the speedy use of the forceps. A good rule is to apply the forceps in the second stage of labor whenever (in head presentations) the presenting part remains stationary for two hours.

Don't's.—Forceps must not be applied unless os is fully dilated. Forceps must not be applied unless head is engaged in the superior strait. Forceps must not be applied until membranes have ruptured.

Forceps must not be applied in impossible positions (chain posterior). Forceps must not be applied unless head is of average size. Forceps must not be applied when disproportion between head and pelvic canal is too great.

Opening the discussion, Dr. E. J. McOscar said that in the narrow or contracted pelvis we have the most urgent demand for Cesarean section. If it can be demonstrated that it is less hazardous for the mother in placenta previa to deliver by Cesarean section, then this method should be used. He said he has been in the habit of using rocking motion of forceps in any direction. In cases of occipito posterior, if the pelvis allows the head to pass, then the soft parts should not be lacerated to any degree in birth of child.

Dr. Drayer stated that he had recently read of a method of controlling hemorrhage in placenta previa by putting a ligature on the uterine arteries until after the delivery and then letting it loose. He says if this can be done then the terror of placenta previa centralis can be abandoned. He had one case of placenta previa centralis in which the mother died in one hour after delivery. He said he would prefer premature delivery at the seventh or eighth month. Yet, as the case goes on to full term, he would advise Cesarean section. Thrombus follows perineal lacerations, but cervical lacerations are not so dangerous.

Dr. Hamilton said that complications are very liable to follow Cesarean section. He gives the following rules for call for forceps, that he has been in the habit of following: If the head has been on the perineum for one hour, apply forceps; after the greatest diameter has been passed and no advance after two hours, apply forceps. If the second stage is on and no progress for three hours, apply forceps. When the case is in labor, Cesarean section is as favorable if not more so than before labor has set in, on account of the cervix being open for drainage.

Dr. H. V. Sweringen said he had had no experience with Cesarean section, but that he had had some cases in which he thinks he would have been able to save the baby if Cesarean section had been performed.

Dr. Havice said he has had three cases of placenta previa. In the first the babe died, second baby lived, and third died in delivery.

In closing, Dr. B. Van Sweringen said, in regard to ligature of the uterine artery, it is unwarranted, first, because it is unnecessary, and, second, because it has a bad effect on the child.

Dr. Duemling suggested the use of the McGraw elastic ligature for uterine artery.

Drs. Beall, Calvin and Dancer also discussed the papers.

Dr. Beall moved that these papers be referred to the state society. Carried.

Vote of thanks was given the nurses for the fine lunch.

Adjourned. J. C. WALLACE, Secretary.

(Meeting of Nov. 17, 1908.)

Society met in the Circuit Court room, with thirty-one members and about one hundred visitors present. The paper of the evening was by Dr. J. N. Hurty, secretary of the State Board of Health, on the subject "The Medical Inspection of School Children," in which he said:

"Out of the 1,339 school children who died during the year 1907 I believe that 80 per cent. of them were murdered by the state, and I also believe that 60 per

per cent. of all school children at the present time need physical examination."

Dr. Hurty began his lecture by telling of some personal experience in which he knew of children who fell back in their studies, grew listless and finally so careless that they dropped out of sight altogether, when it was found afterward that the little ones were suffering with physical defects which precluded their keeping up with their healthy fellows.

"In France, England, Switzerland, Germany, Hungary, Austria, Norway, Sweden, Roumania, Japan, Egypt, South America and even in darkest Russia, medical inspection of schools is in force, but here in Indiana, where we believe we have the finest school system in the world, we allow our children to suffer and die, all for the want of a little care and attention upon the part of the state. By a simple medical inspection of the children many hundreds of lives could be saved each year, and yet we cry that we have no money with which to do the work."

Dr. Hurty severely scored the school boards of the state for their carelessness along those lines. He stated that while he was in Mexico he was taken on a visit to the public schools, and the very first thing he ran across was a physician upon his periodical inspection of the school children. "These Greasers," said the doctor in fine scorn—"these Greasers whom we despise—could teach us something in charity; could teach us that unless we look after the children we are doomed."

Dr. Hurty also told of a visit made to the public schools in Terre Haute, and said: "In a visit to one school in Terre Haute I found one child with pulmonary tuberculosis, several with diseased tonsils, several with sore eyes, several with defective vision, a number with curable diseases, but who were sure to die if left to their fate, yet when I called upon the people to put down this awful thing by medical inspection of the children, business men who were supposed to possess real acumen for business stated to me that there was no money for the purpose."

The speaker scored such a system, tore it into shreds, and from even the economical point of view showed that the state would save thousands upon thousands of dollars annually.

At the conclusion of Dr. Hurty's address, Dr. H. O. Bruggeman, secretary of the board of health, made a short talk and told how the department of health was seeking to provide for medical inspection of the school children, but stated that the old cry of "no money" was made each time the authorities were approached. "When the people become aroused the money will be forthcoming," said Dr. Bruggeman.

Dr. A. P. Buchman, president of the board of health, in a short speech, went after the school board and called on the people to force the board to provide for such an inspection. "Unless you go after the school board with Rooseveltian clubs," said Dr. Buchman, "you will get nothing done, but if you do go after the board and keep after it perhaps we may secure some provision for the saving of the lives of the little ones."

The discussion then became general and was participated in by the Rev. A. K. Zartman and others who were present.

On motion of Dr. Bulson a vote of thanks was extended Dr. Hurty.

Adjourned. J. C. WALLACE, Secretary.

CLAY COUNTY.

The Clay County Medical Society met in regular session at the office of Dr. Hollingsworth, in Brazil, Nov. 26, 1908. Meeting called to order by president. Minutes of the last regular and one special meeting read and approved, including final reports of committees.

Diphtheria was the title of a very carefully prepared paper by Dr. L. M. Weaver, of Staunton. He vigorously advocated prophylaxis, warned against the kissing habit among the sick and convalescent, and urged the early and thorough use of antitoxin.

Discussion was opened by Dr. J. F. Smith, followed by several others, who complimented the author on the completeness of his presentation of the subject.

Hydrophobia was the title of a paper by Dr. William Palm, of Harmony. He gave an excellent historical diagnosis between true rabies, tetanus and pseudo-rabies. He advocated prompt suction and cautery of the lacerated wound, caused by the bites of animals, and the Pasteur treatment for demonstrated cases.

Discussion was opened by Dr. L. L. Williams, who also reported details of a recent case which is yet under treatment.

The papers of Dr. Dilly, of Brazil, and Dr. Vandion, Clay City, were continued to the next regular meeting to be held December 17, at which time Dr. James, of Cory, will give an account of his recent travels in Europe.

Adjourned. G. W. FINLEY, Secretary.

DEARBORN COUNTY.

The Dearborn County Medical Society held an open session and banquet at the Lawrenceburgh Commercial Club rooms, Tuesday, Nov. 24, 1908, to which the doctors and their wives were invited. In the absence of the president, Dr. H. H. Sutton, of Aurora presided. Drs. D. E. Johnson, of Moore's Hill, and O. S. Jaquith, of Lawrenceburgh, presented the subject of "Diphtheria," Dr. Jaquith confining his paper entirely to the treatment, while Dr. Johnson called attention to the well known fact that all epidemic diseases as they occur throughout the country prevail in cycles of mild and severe form, and that possibly our splendid mortality statistics in diphtheria at present might in a measure be due to a mild form of this disease. The discussion following was very free, some of the ladies taking part. The early use of antitoxin was the treatment universally recommended. Dr. Jaquith laid special stress on the inhalation of oxygen gas in laryngeal diphtheria, stating that it gave marked relief in the attacks of suffocation. Dr. Ford, of Aurora, in a paper on tuberculosis, gave some excellent advice as to the management of the disease. This paper was discussed by Dr. Smith, of Lawrenceburgh.

The banquet followed the regular program, and added much to the pleasure of the evening.

Adjourned. H. H. SUTTON.

ELKHART COUNTY.

The Elkhart County Medical Society met in regular session at the Elkhart Academy of Medicine, Nov. 5, 1908. Minutes of previous meeting read and approved. The election of officers for the coming year resulted as follows: President, Dr. Fred. N. Dewey; vice-

president, Dr. Herbert K. Lemon; secretary, Dr. Allen A. Norris; treasurer, Dr. N. Ophelia Stauff; censor, Dr. Daniel L. Miller.

First Aid to the Injured was the title of the first paper on the program, by Dr. I. W. Short. (Paper appears in this number of THE JOURNAL.)

Cystitis was the title of a paper read by Dr. E. D. Stuckman, in which he said that cystitis, or inflammation of the bladder, is caused by traumatism, retention of urine, or extension of inflammation from adjoining parts. The most characteristic and common symptom is frequent and painful micturition, chills, fever, sweating and head symptoms, caused by the absorption of decomposed shreds of sloughed membranes. Urinary findings usually acid, specific gravity 1005 to 1015, smoky tinge; microscope finds blood and pus corpuscles. Prognosis good in most cases. Perfect rest and quietness form an important part of the treatment. For sympathetic rectal tenesmus morphia or belladonna suppositories may be used. As appropriate medicinal treatment he mentioned hydrobromic acid, diaphoretics, diuretics, the sulpho-carbolates, calcium sulphide, sodium salicylate, and frequent washing of the bladder with boric acid water.

In the discussion, Dr. J. C. Flemming said that it has long been proven that it is bad practice to probe bullet wounds to any great extent. In abdominal wounds where an operation is indicated it should be done early. In cystitis some of the newer drugs are very useful. Many of the so-called cases of malaria, that are in reality cystitis and resist all treatment, need drainage. Urotropin is a splendid medicine in many of these cases.

Dr. M. M. Eckleman said that he was of the same opinion as the previous speaker with reference to the probing of gunshot wounds. In his eight years of experience as physician for the poor he met many of this class of cases, and had much better results if the wounds were not probed. In fractures he suggested that the fracture be reduced as early as possible, and not wait for developments. He would suggest the use of an anesthetic in all cases of fracture, in order to produce complete relaxation. He suggests the use of adrenalin instead of strychnin in shock.

Dr. J. A. Work, Sr., said that in cystitis the cause should be removed, and in most cases the disease will get well. The diet is an important factor in treatment. Many of these cases are large meat eaters. To put them on a vegetable or cereal diet will make a great difference in our cases.

Dr. I. W. Short said that in severe cases of cystitis the patient should be put to bed and kept quiet. Irrigations in many cases will be of no service.

Dr. A. A. Norris, speaking of the diagnosis of cystitis, said that it is generally not difficult. Tuberculosis of the bladder is secondary to tuberculosis of the testicles or of the kidneys. Washing out the bladder is good practice in many of the cases if the technic is right. Salol is very useful in many of these cases, perhaps better than formin.

Dr. W. A. Neal said that in the acute cases of cystitis he found many years ago that from one-half to a grain of nitrate of silver to an ounce of water is the best wash he has used. He rarely failed to give relief when this solution was employed.

Dr. J. A. Work, Jr., said that chronic cystitis divides itself into two classes, with and without pus.

In the former nitrate of silver is useful, while in the latter where there is much pain he advises the use of very large quantities of normal salt or boracic acid solutions.

Dr. J. B. Porter, with reference to the treating of flesh wounds, said that it would be well to omit sutures in this class of cases unless where a cosmetic effect is desired. Better results are obtained by dressing the wound without suturing. As to cystitis, in general very little is accomplished by washing the bladder out. In acute cases nitrate of silver serves best, used in weak solutions. In chronic cases washing will often make them worse. In fact, balsams and everything else often do no good. Hyoscyamus hydrobromid is useful in the prostatic varieties.

Dr. E. M. Hoover said that where there is frequent micturition and tenesmus, atropin and hyoscyamus hydrobromid are useful.

Dr. A. H. Snapp, in discussing the subject of cystitis, said that he first used medicines internally, and then resorted to irrigations if the former gave no relief. He always puts his patients to bed, and can not understand why some physicians object to quietness.

In closing the discussion, Dr. I. W. Short stated that he advocated the hot sitz bath in cystitis. He stated that a fracture should be reduced as soon as the patient is in a comfortable or permanent place. No one should try to reduce a fracture upon the street or in a place that is not suited. Make the patient as comfortable as possible, remove him to his home or to a hospital, and then reduce and dress the fracture.

The society adjourned to meet December 3, when it will have a public meeting on the subject of Tuberculosis. Speakers outside of the profession are invited to participate in the program.

Adjourned.

GEORGE W. SPOHN, Secretary.

GREENE COUNTY.

The regular meeting of the Greene County Medical Society was held at Switz City, Nov. 12, 1908. Minutes of previous meeting read and approved. Communications from Owen, Monroe, Daviess and Sullivan Counties were read, regarding their fee bill and the possibility of adopting a uniform fee bill in the second district, all reporting favorably except Sullivan County.

Papers were read by Drs. Lukenvill, of Marco; Mallett, of Switz City, and Mason, of Bloomfield, on "Epilepsy," which covered the subject thoroughly. There were eighteen members present, and a good meeting was enjoyed. A banquet was served at Hunt's Tavern in the evening. The next meeting will be held at Bloomfield, Dec. 17, 1908, and the subject for discussion will be apoplexy.

Adjourned.

F. A. VAN SANDT, Secretary.

GRANT COUNTY.

At the regular meeting of the Grant County Medical Society, Dr. M. L. Harris, of Chicago, talked on "Tuberculosis of the Kidney." His talk was one of great instruction.

Dr. Jos. Maurer removed a submerged tonsil, explaining in detail his method.

Adjourned.

O. W. McQUOWN, Secretary.

HANCOCK COUNTY.

The Hancock County Medical Society met in regular session in the small court room at Greenfield, Ind., November 5. Society called to order by President C. A. Barnes. Minutes of previous meeting read and approved. The Board of Censors reported favorably on the applications of Drs. M. M. Adams, E. A. Hawy, E. E. Mace and F. W. Creagor, and on motion they were elected to membership. The following cases were presented: Membranous Croup, Dr. Milo Gibbs; Pemphigus, Dr. Allen; Tuberculosis, Dr. L. B. Griffin; Tuberculosis, Dr. Adams; Epithelioma, Dr. E. R. Gibbs.

The election of officers for the year 1909 resulted as follows: President, Dr. C. A. Barnes; vice-presidents, Drs. Allen and Milo Gibbs; secretary-treasurer, E. R. Gibbs; censor, Dr. Griffin.

Adjourned.

E. R. GIBBS, Secretary.

HUNTINGTON COUNTY.

The Huntington County Medical Society met in regular session on the evening of Nov. 10, 1908, with an exceedingly large attendance.

Dr. G. M. O'Leary presented the paper of the evening on "Anesthetics." The essayist confined himself entirely to ether and chloroform. At the outset he stated that many of our schools graduated men who were absolutely ignorant of the elementary principles of anesthetic administration or with a very imperfect knowledge at the most. He discussed the wide difference of opinion as to the several anesthetics, concluding that each had its place; that the men who are familiar with both are in a position to obtain better results than those who are only acquainted with one, and that in regard to all anesthetics much more depends on the skill and experience of the anesthetist than on the nature of the anesthetic or the inhaler used. The safest anesthetic is nitrous oxid, the death rate of which is 1 in 100,000. The essayist gave the history of chloroform anesthesia, describing the best methods and preferring the drop method using a Schimmelbusch mask. He discussed the pulse as a guide in enabling the anesthetist to determine the stage of anesthesia. This could be relied on in adults but not in children. In children the breathing is of greatest importance. The various accidents and complications were discussed. His experience with chloroform has been very satisfactory. In three hundred cases in hospital service all but three were chloroform.

Taking up ether, the essayist discussed its history and the various methods of administration. He preferred the semi-open method with a Blake improved inhaler. He discussed the method of administration with its complications. The contra indications of ether anesthesia were enumerated and their treatment discussed. He took up the preparation of patient before and after anesthesia. Urine should be examined. Lavage of the stomach following anesthesia is now being used as a routine procedure by some surgeons.

In the discussion, participated in by all present, the paper received favorable comment. A wide difference of opinion and preference for either of the drugs was very evident.

Committee consisting of Drs. Morgan, Clokey and Krebs was appointed to arrange for the annual banquet to be held Dec. 17, 1908.

Adjourned.

W. H. KREBS.

KOSCIUSKO COUNTY.

The society met in regular session Tuesday, November 19. Dr. F. H. Foster, of Warsaw, read a paper on "The Chemistry of Bile Formation of Glycogen and Urea;" Dr. E. E. Haworth, of Claypool, on "Carcinoma of Bile Passages and Liver;" Dr. L. W. Ford, of Syracuse, on "Cholelithiasis, Symptoms and Treatment," and Dr. P. G. Fermier, of Leesburg, on "Amyloid Diseases and Cirrhosis of Liver." These papers were discussed by Drs. Burket, Foster, McDonald, Anglin, Young, Bash, Leedy, Haworth and Howard.

Resolutions were adopted requesting the Representative from the Thirteenth District and the U. S. Senators from Indiana to use their best efforts to co-operate in the effort being made to concentrate United States health bureaus into one department and to eventually establish a department of health.

The amendments to the constitution and by-laws read at the last meeting were adopted. These amendments included an increase in the annual dues. They are therefore now \$3 a year, which includes the State Association dues.

Adjourned.

C. NORMAN HOWARD, Secretary.

MADISON COUNTY.

The Madison County Medical Society met in regular session at Summitville, Nov. 24, 1908. Society called to order by president, Dr. W. A. Boyden.

Five Atypical Cases of Typhoid Fever was the title of a paper by Dr. L. F. Mobley.

Smallpox as the Busy Physician of To-Day Sees It was the title of a paper by Dr. E. V. Boram, in which he said that whereas at one time smallpox caused one-tenth of all deaths, the results of vaccination as a preventative have been so successful that, with our present knowledge no one need acquire the disease. He attributed the usual mild form occurring in recent years to the results of this protective measure, and believes it is a well proven fact that no other disease possesses a specific so certain in results. Councilman's experiments in the inoculation of monkeys and his claims as to the discovery of a specific germ of infection were discussed, as were also the contagiousness of the disease and its mode of transmission. The writer mentioned an instance where an individual acquired smallpox from a vacant house in which the disease had existed many months before, giving this as the only known source of infection in that case, thus illustrating the great length of time the contagion may be dormant. The incubation period of seven to fourteen days, and the characteristics of the eruption and its passage through the successive stages, beginning with the scarlatinous rash on the second or third day, followed by papule, vesicle, pustule desiccation, and desquamation were discussed in enumerating the symptoms and in reference to the diagnosis. The umbilication of the vesicles as they change to pustules, and the appearance of eruption in palms of hands and on soles of feet were mentioned also in speaking of diagnosis. He insisted on frequent bathing, especially after the pustular stage, as it limits the spreading of scales and adds to the patient's comfort. He discussed methods supposed to limit pitting, including absence of light, administration of calcium sulphide and opening of pustules. Early puncture of pustules he believes has proven most useful in his

cases, although no method succeeds in many cases. The methods of disinfection of houses and furnishings were given in closing the paper.

Adjourned.

B. H. Cook Secretary.

NEWTON COUNTY.

The Newton County Medical Society met at Brook, Ind., Nov. 20, 1908. Dr. T. E. Cotten reported cases of vulvar edema accompanying pregnancy in the fourth month, and malaria. Dr. C. C. Bassett reported a case of kinking of the ureter, with subsequent operation and finally the extirpation of the kidney. Dr. Frank Kennedy also reported a case of broncho pneumonia. Patient, a female, age 62 years. The usual symptoms were manifest; coarse râles heard over all parts of the lung. On the third day of the disease patient ceased to cough, and within an hour or two died from a hemorrhage, the blood issuing from the mouth in a great stream. Death came at once after the hemorrhage began. No autopsy was secured. It was the opinion of the speaker and the society that an aneurism of the transverse aorta had eroded through the trachea and burst, causing the enormous hemorrhage and death. Dr. Recker, the president, reported a case of puerperal eclampsia, which called forth a general discussion. Many theories for the condition were advanced, and the treatment received full consideration. The next meeting of the society will be held at Brook, Dec. 18, 1908.

ORANGE COUNTY.

The Orange County Medical Society met in bi-monthly session at Orleans, on Nov. 10, 1908. Although not a large number of members were present, some interesting reports of unusual cases were presented. Resolutions were offered on the death of one of the members of this society, Dr. Franklin P. Hunt, of Leipsic, which occurred on Sept. 22, 1908.

The next meeting will be held at French Lick on Jan. 12, 1909, and a large attendance is expected.

Adjourned.

S. F. TEAFORD, Secretary.

POSEY COUNTY.

Posey County Medical Society met at the Court House in Mount Vernon, Ind., Friday, Nov. 6, 1908.

Meeting called to order by Dr. Wm. M. Holton.

Minutes of previous meeting read and approved.

Application of Dr. K. C. Fitzgerald, of New Harmony, was presented. There being no objection, he was admitted.

It was moved and seconded that the by-laws be amended so as to provide for quarterly meetings, subject to the call of the secretary, as follows: Poseyville in mid-winter, New Harmony in the spring, Wadesville in the summer, and Mt. Vernon in the fall.

Dr. S. W. Boren, of Poseyville, read a paper on Puerperal Eclampsia. The paper described the condition in full and included a report of cases. The view that the condition is a manifestation of toxemia of pregnancy was adhered to and a description of the attack was minutely given. The etiology was considered. In the methods of treatment given, special

attention was directed to prophylaxis, and routine examination of the urine was insisted upon. Treatment of the attack should consist of sedatives, elimination and supportive measures.

Discussion was participated in by Drs. Holten, Hall, Hicks, Fullenwider, Rawlings, Henderson, Ramsey and Hall. A number of cases were reported and there was a free interchange of ideas. The discussion showed that calomel was a favorite remedy in cases in which time permitted its use. Chloroform and morphin were apparently the favorite sedatives, with chloral and veratrum close seconds. Opinion differed concerning the advisability of hurriedly emptying the uterus. Elimination by any and all means was agreed to be of prime importance.

The writer of the paper is to be congratulated on his thoroughness, and that great interest was taken was manifest by the earnestness of the discussion.

Adjourned.

C. L. RAWLINGS, Secretary.

VIGO COUNTY.

The Vigo County Medical Society met in regular session October 27. Dr. A. C. Kimberlin, of Indianapolis, occupied the evening with a clinical lecture on "Blood Pressure." After thoroughly explaining the technique and the different apparatus used, the Doctor demonstrated the Janeway and Erlanger instruments on the cases present. The eight cases embraced different kinds of heart and kidney lesions and furnished sufficient variety to show the different degrees of blood pressure. The lecturer was kept busy until a late hour answering questions.

Adjourned.

CHARLES N. COMBS, Secretary.

The society met again December 17, and Dr. T. Victor Keene, director of the Pasteur Institute, of Indianapolis, addressed the meeting on the subject of "Hydrophobia." Dr. E. S. Niblack reported a case of hydrophobia in a boy, 12 years old, who had been bitten three months before; the boy dying within four days of the first symptoms. In view of the rabies scare in Terre Haute this meeting was of timely interest. A resolution was passed asking the council to pass an ordinance requiring all dogs in the city to be muzzled for all time.

The following changes have been made in the membership lately: Dr. E. M. Glaser, transferred to the Franklin County Society; Dr. A. G. Rogers, transferred to the Henry County Society, and Dr. C. A. Ray, of Cory, Ind., suspended for non-payment of dues.

Adjourned.

CHARLES N. COMBS, Secretary.

NORTHERN TRI-STATE MEDICAL ASSOCIATION.

Thirty-fifth semi-annual meeting of this association will be held at Ann Arbor, Mich., Tuesday, Jan. 12, 1909. The following is the program: "Neurological Clinic," 9 a. m. to 10 a. m., Dr. C. D. Camp, from the university; "Clinical Methods of Examining the Insane, with Cases," from 10 to 11 a. m., Dr. A. M. Barrett, from the university; "Gynecological Clinic with Surgical Operations," from 11 to 12 a. m., Dr. Reuben Peterson, from the university; "A New Factor in the Diagnosis of Gastric Ulcer," with lantern-slide demonstrations," Dr. A. W. Crane, Kalamazoo, Mich.; "The Early Diagnosis of Gastric Cancer," Dr. L. Breischer, Detroit, Mich.; "Intestinal Tuberculosis, with Report of Cases," Dr. G. W. McCaskey, Ft. Wayne, Ind.;

"Why Mastoiditis Is Sometimes Misunderstood," Dr. Emil Amberg, Detroit, Mich.; "Some Phases of the Treatment of Syphilis," Dr. Jeremiah Metzger, Toledo, O.; "Further Observations on Cancer," Dr. Geo. W. Crile, Cleveland, Ohio; "Incipient and Atypical Graves Disease," Dr. Chas. G. Jennings, Detroit, Mich.; "Some Common Misconceptions of the Symptomatology of Aneurisms of the Thoracic Aorta," Dr. Robert B. Preble, Chicago, Ill.

The faculty of the university and the local profession will entertain all the visiting physicians. A large attendance is anticipated. Every member is expected to bring at least one visiting physician.

GOERGE W. SPOHN, Secretary.

NINTH COUNCILOR DISTRICT MEDICAL ASSOCIATION.

The regular annual meeting of this society was held at Crawfordsville, Nov. 10, 1908, with sixty members present. The doctors were welcomed to the city by the Hon. Jere West, Judge of the Circuit Court, of Montgomery County. This was responded to by President Chittick, who delivered his annual address.

Ocular Manifestations of Renal Toxin was the title of the first paper, by Dr. J. D. Hadley. This was discussed by Drs. W. G. Swank, of Crawfordsville; H. Woolery, of Bloomington; J. R. Etter, of Crawfordsville, and W. S. Walker, of Lafayette.

Direct Digital Examination of the Eye was the title of a paper by Dr. H. E. Greene, of Crawfordsville. The essayist proposed to examine the eye by using the tips of the index fingers directly upon the cocaine-ized eye. The paper was discussed by Dr. John Sickler, of Frankfort, and Dr. George F. Keiper, of Lafayette.

The Treatment of Salpingitis was the title of a paper by Dr. W. H. Williams, of Lebanon. This paper was discussed by Drs. W. G. Swank, of Crawfordsville, and W. S. Walker, of Lafayette.

The courtesy of the floor was extended to Dr. Homer Woolery, of Bloomington, to explain the use of Flexner's serum in the treatment of cerebro-spinal meningitis. Its merits were discussed by Professor Burrage, of Purdue, and Drs. W. S. Walker and W. R. Moffitt, of Lafayette.

The House of Delegates having adjourned, Dr. E. A. Gilson presented a resolution from the Fountain County Medical Society looking to the better protection of physicians' bills than now enjoyed under our present laws. The physicians are expected to see their senators and representatives in the forthcoming session of the Legislature and secure the passage of such a bill. The Committee on Legislation of the Indiana State Medical Association is asked to cooperate.

Dr. J. N. Hurty, the guest of honor, addressed the meeting on "The Medical Inspection of School Children." The paper was discussed by Drs. E. A. Gilson, of Covington; Professor Burrage, of Purdue; G. W. Miller, of Covington; G. F. Keiper, of Lafayette, and A. R. Tucker, of Noblesville. It was ordered that the Committee on Public Policy and Legislation submit the sense of this meeting concerning the inspection of school children and teachers to each legislator in the coming session of the legislature.

The election of officers resulted as follows: President, Dr. Charles Chittick, Frankfort; first vice-president, Dr. John C. Webster, Lafayette; second vice-president, Dr. S. L. Ensminger, Crawfordsville; secre-

tary, Dr. Geo. F. Keiper, Lafayette; assistant secretary, Dr. Roy Gerard, Crawfordsville; treasurer, Dr. F. A. Tucker, Noblesville.

It was ordered that hereafter the society meet in May because of the meeting of the Indiana State Medical Association in October.

Dr. A. R. Tucker, on behalf of the Hamilton County Medical Society, extended an invitation to meet in Noblesville next May. It was unanimously accepted.

At 6 o'clock, at the Masonic Temple, a banquet was served, at which a number of toasts were proposed, to which happy responses were made.

GEORGE F. KEIPER, Secretary.

ELEVENTH INDIANA COUNCILOR DISTRICT MEDICAL ASSOCIATION.

The second annual session of this association was held at Wabash, under the auspices of the Wabash County Medical Society, on the afternoon and evening of Oct. 22, 1908. The afternoon session was devoted to the business and scientific program, the evening session to the banquet at which both the doctors and their wives were present. During the afternoon session the visiting physicians' wives were entertained by the ladies of the Wabash County Medical Society.

The afternoon meeting was called to order at 2:30 p. m. by the president, Dr. C. H. McCully, of Logansport. All the counties of the district were well represented. The minutes of the previous meeting, held at Logansport, were read and adopted as read. The secretary-treasurer, in his annual report, said that, beginning with a membership of seventeen, in less than one year the association has grown so that it now has a paid-up membership of forty-nine. A deficit amounting to \$43.39 was reported, but with the expected increase in membership it was thought that all expenses of the association can be met. Report adopted.

Upon suggestion of the Chair the secretary read that section of the Constitution which provides that only those members of the district association were entitled to all the benefits and privileges of the association who had paid their annual dues of \$1.00 before the beginning of the annual meeting.

Dr. Lorin Smith, Wabash, chairman of the arrangement committee, reported that the visiting ladies were to be entertained at a musicale and reception by the ladies of the Wabash County Medical Society and that all proper arrangements had been made to entertain a goodly number at the banquet in the evening. Report of the committee adopted and the committee discharged with thanks.

On motion, duly carried, it was decided to hold the next meeting at Marion, May 20, 1909.

The secretary was instructed to send a message and greeting of good will to the Ninth District Association, which was then in session at Anderson.

Election of officers resulted as follows: President, Dr. J. Spooner, Peru; secretary-treasurer, Dr. M. H. Krebs, Huntington.

Dr. Ader, Somerset, presented resolutions concerning the vending or selling of any kind of patent medicine, also the treating of persons by any form of electricity or massage by any one except a regularly licensed physician or surgeon, and requesting Congress to pass a bill, with suitable penalties attached, to prohibit the same. The resolutions were referred to the Committee on Public Policy for action and with instructions to report at the next meeting. The ques-

tion of having the coroner a licensed physician was also referred to the Committee on Public Policy and Legislation.

Acute Intestinal Obstruction was the title of a paper presented by Dr. W. L. Grayston, of Marion. The essayist urged the importance of early diagnosis and the thorough study of initial symptoms. He stated that surgeons were liable to neglect the study of diagnosis and resort too cheerily to the exploratory investigations of lesions in the abdominal cavity. On the other hand, many lives would undoubtedly be saved if all physicians realized the futility of wasting time in the effort to settle diagnostic problems when the fecal current and perhaps the blood are stopped by mechanical causes demanding instant operative procedures. High mortality is due to delay in making the diagnosis. The three types of obstruction ordinarily accepted are, first: mechanical (the most frequent cause of an acute obstruction); second, the adynamic or paralytic form; third, the dynamic or spastic form. The last is rare and few cases reported. Pain is generally the first symptom. It is severe, may be continuous and occasionally increases by paroxysmal colic. It is practically always present, unless gangrene has occurred and the patient gone into collapse and stupor. The pain may be diffuse, as in volvulus, or localized, as in various forms of hernia in the presence of constricting bands. Initial pain may subside and be followed by secondary pain due to peritonitis.

Vomiting follows quickly on appearance of pain, and rarely precedes pain, especially in cases of high obstruction. It begins within the first twelve to twenty-four hours and persists until the end, unless the obstruction is relieved. It is accompanied by nausea, hiccough and eructations of gas; is copious, and consists of stomach contents; may become bile stained, and finally has intestinal odor. Causes of vomiting may be, first, reflex; second, may be due to septicemia; third, vomiting due to actual obstruction in the lumen of the bowel. It is still a question whether anti-peristalsis does occur and is the cause of fecal vomiting.

Complete obliteration induces absolute constipation, even when the obstruction affects the upper bowel. Peristalsis below the site of the lesion seems to be inhibited by reflex action. Contents of the rectum and lower colon may be washed out by enemas, but, as a rule, there is no spontaneous evacuation of intestinal gases or of feces.

Tympanites may be present in a moderate degree, but when peritonitis has developed as a secondary complication the distension becomes more general and may be very great. The shape of the abdomen is changed and the least asymmetry should be carefully studied.

It is important to diagnose obstruction, its location and character. The most common site is the lower quadrant of the abdomen. Intussusception chiefly found in the young; very common in the ileo-cecal region; most frequent in some portion of the colon. Volvulus is most apt to occur in the sigmoid colon, especially in the aged. A differential diagnosis of the various forms of obstruction is usually difficult and often impossible, and if the diagnosis can not be established with a fair degree of certainty within twelve to twenty-four hours, open the abdomen aseptically and inspect its contents.

The treatment depends on the form of obstruction. Operations should be done not only for the relief

sought, but also in a manner that shall leave a minimum of post operative sequelæ of all kinds. Blood clots left in the abdomen will produce adhesions at that point. Handle the intestines as little as possible, avoid unnecessary tearing of the peritoneum in separating adhesions and above all prevent the spread of pus. Cover the denuded parts by peritoneum. The denuded small bowels are the most dangerous. It is an error, frequently made, to open the abdomen, relieve the obstruction and allow the fluid contents above the obstruction to pass down into an empty healthy absorbing gut below, and simply kill the patient by the lethal dose. The bowel should be opened above the point of obstruction, should be drained of its poisonous contents and later use lavage into both afferent and efferent loops.

In the discussion, Dr. J. L. Gilbert, of Logansport, said that pain is most always the first symptom of obstruction, though sometimes it is absent altogether. He cited a case where a patient had passed a gall stone and immediately the obstruction of the bowel was relieved, yet this patient never had any pain. But pain is an important early symptom, and is often a guide as to the location of the obstruction. There can be sudden pain which is due to a partial choking of the bowel. This may last an indefinite period and then may be followed by a distinct pain due to a tearing of the inner coating of the bowel. Pains are often excruciating, even before the patient is seen. When a doctor is called in such a case he should make his diagnosis and then operate. The most important part of the treatment is to drain.

Dr. C. L. Wright, of Huntington, said the diagnosis is the most important part to be considered. When you have the symptoms, the next question is, "What is the cause of the obstruction?" Stercoraceous vomiting only can determine it. The reflex peristalsis and vomiting are the only sure symptoms to go by.

Dr. Gilbert, of Logansport, said: "I do not believe that stercoraceous vomiting can determine the matter. If we wait until the pulse begins to fail, our patient is already lost."

Dr. Wright, of Huntington, said: "How are you to know, if these symptoms of reflex peristalsis are not seen?"

Dr. Stevens, of Logansport, said that he was called to see a child fifteen months old and found the case very difficult of diagnosis. The case resembled more a bilious colic than anything else. The child was immediately operated, obstruction relieved, and he was able to report a prompt recovery. If we wait for continuous vomiting he believes we wait too long, and even the knife would be of no avail.

Dr. McCully, of Logansport, said: "There is no age limit. Extremely old and extremely young patients bear operations best. Conditions ought to be recognized early and there should be no hesitancy on the part of the doctor."

Dr. Grayston, of Marion, in closing the discussion, said that it is a mistake to let the case go until vomiting is profuse.

Ocular Manifestations of Constitutional Diseases was the title of a paper read by Dr. H. B. Hill, of Logansport. There is no special histologic tissue in the eye, and it is subject to pathologic processes similar to those in other parts of the body. Its circulation, nutrition and nerve supply are parts of a universal system and it must suffer with other members.

Seeing is a muscular act, and as such sight feels the stress of fatigue, nerve exhaustion, shock, debility or toxemia, and is subject to weakness, blurring or suspension, under their influence. The anatomic characteristics rendering the eye liable to nutritional circulatory and inflammatory disturbances are: The cornea, lens and vitreous have no blood vessels, the iris floats in the aqueous and glides over the lens capsule, the retinal arteries are end arteries, the smallest in the body, and are subject to changes of intraocular tension. With constitutional disturbances of nutrition, the cornea, lens and vitreous will be affected quickly. With arteriosclerosis or endarteritis the minute retinal arteries give way under lessened intraocular tension. Inflammatory conditions which attack the iris easily cause adhesions between it and the lens capsule.

Syphilis, rheumatism, nephritis, gonorrhea, leukemia, anemia, rachitis, hysteria, gout, smallpox, scarlet fever, measles, lead, alcohol, tobacco, and quinin toxemia, and many other diseases have their ocular complications. Bright's disease presents early and late ocular symptoms which are often means of diagnosis, and judging to some extent the progress and prognosis of the disease. Edema of the integument of the lower lid is an early symptom. Hyperemia of the papilla and retina, retinitis, neuritis, neuroretinitis, choked disc with nearly complete blindness are symptoms of uremia as are atrophy of the optic nerve, or detached retina. Retinitis is not an early symptom of Bright's disease, but is often the first to lead to a diagnosis. The disease affects the blood vessels as an arteriosclerosis, and the retinal changes follow their deterioration. Retinal lesions are usually symptoms of advanced nephritis, due to contracted kidney, and make their appearance after a period of high vascular tension, when elimination is beginning to fail. Prognosis is grave, even in acute nephritis following exanthemata or complicating pregnancy, and the loss of vision may be permanent. Patients with chronic Bright's disease, under the best care, live one to two years after retina infiltration.

Combination of retinal disease and uremic amblyopia are rare. Diabetic cataract may occur at any age and disappear if the sugar disappears from the urine.

In acquired syphilis, iritis occurs in the second to the ninth month after the infection, sometimes as late as the eighteenth month. In two-thirds to three-fourths of the cases both eyes are affected. It is of exudative, plastic type and sometimes complicated by severe cyclitis. It rarely recurs after complete recovery. Chorioiditis and retinitis occur from the sixth month to two years after the infection, occasionally as late as the fourth year. They are prone to be chronic and recurrent and to cause a secondary atrophy and blindness and affect both eyes. As tertiary lesions, oculomotor paralysis in connection with locomotor ataxia is frequent. Lesions anywhere in the cranium cause optic neuritis. Congenital syphilis occasionally shows iritis in secondary stage, corresponding to same in acquired syphilis in the second to fifteenth month, and chorioiditis from the sixth month to the third year. Later keratitis, the most frequent manifestation of inherited syphilis, makes its appearance from the sixth to the fifteenth year. It runs a very chronic course, almost invariably in both eyes, one after the other, and is sometimes complicated by iritis.

Rheumatic eye diseases present themselves, usually, after long periods of general rheumatic infection, as iritis, scleritis or tenonitis. These may occur with the acute inflammatory attack but are more frequent with relapses. They must be differentiated from syphilis, gonorrhea, gout and traumatism. Pain is more severe, attacks last longer and are less affected by treatment and more apt to relapse than other forms of iritis. Tenonitis is quite like an attack of rheumatic arthritis; swelling, chemosis, painful motion, and tenderness present themselves. Iritis is very apt to be followed by posterior synechiæ or cyclitis.

Nervous diseases have ocular symptoms that are important indications of acute inflammation or deep seated degenerative processes and are frequently important as guides in diagnosis.

The fundus presents an important opportunity for the study of circulatory conditions in their relation to the central nervous system and general blood pressure by means of the ophthalmoscope, which instrument, with the perimeter, should be in as general use as the stethoscope, sphygmograph and the hemometer. Profound neurasthenia or epilepsy, caused by eye strain, the slight inconvenience of easily tired eyes, the permanent, total blindness, following acute hemorrhage from the stomach, bowels or uterus, the transient dizziness or scotoma of indigestion are extreme examples of possibilities to be considered in relation of ocular to constitutional disease, and illustrate the futility of intelligent practice of medicine too closely specialized.

Dr. Jordan, of Wabash, called attention to the impairment of vision, scintillations, ocular hallucinations and eye pain associated with migraine; the protrusion of the eyes, abnormal winking and imperfect closure of lids in exophthalmic goitre; the contracted pupils in irritation of the brain from tumors, abscess, hydrocephalus and meningitis, and dilatation of the pupils when pressure increases from these causes and occurring preceding and following death; the distortion of color and form sense in epilepsy and hysteria; and the open or staring expression of the eyes in somnolence, coma vigil, insanity and abstraction of the mind.

Dr. Hoffman, Logansport, said Stevens, of New York, has called attention to the inclination of the head in those prone to consumption. They have eyes adjusted for a plane much higher than the horizon. Fewer people lose their mind from blindness than deafness, the ratio being 4 to 1.

Dr. Stevens, Logansport, said that the best practitioner is the one who makes the best use of the specialist. The field is too large and takes in too many different sciences for one man to master them all.

Dr. Gilbert, Logansport, said the best specialist is the one who makes the most use of the general practitioner. A doctor should have ten years of general practice before he specializes. The general practitioner should use the ophthalmoscope. With this you can see the circulation and other things, and we ought to use the ophthalmoscope and be more familiar with the eye.

Owing to the absence of Dr. H. M. Hall, of Camden, his paper was presented and read by the secretary. "The Diagnosis and Treatment of Pneumonia in Children" was a thorough and exhaustive résumé of the entire subject. He first discussed the anatomy of the chest and its bearing on physical signs in pneumonia.

The forms, broncho and lobar pneumonia were taken up in reference to symptoms, subjective and objective, with physical signs and modes of onset. He divided the various types of broncho-pneumonia into, first, very acute, or acute congestive; second, capillary form; third, the ordinary form. In the secondary forms of bronchopneumonia he discussed those complicating pertussis, measles, scarlatina, diphtheria, influenza and ileocolitis.

He discussed at length the classical symptoms and gave the differential diagnosis between lobar pneumonia and broncho-pneumonia. He discussed the subject of treatment under prophylaxis and general management.

Prophylaxis.—It becomes our duty to impress our clientele with the fact that a constant per cent. of moisture in the air, about 60 per cent. of saturation, is more important than a high temperature; an ample supply of fresh air than the price of a little coal; that extra bedding and a moderate degree of heat in the well ventilated sleeping room are among the best of investments; that wholesome food and plenty of it when properly selected for the individual are much cheaper and better than doctors' and undertakers' bills. Further than that we can not strongly impress them that a cold may be and often is only the precursor of a pneumonia of the most dangerous type to children, and that its treatment and the removal of the predisposing cause of recurrence is of the greatest importance.

General Management.—Given a case of pneumonia, the patient should first be given a warm bath with soap and water and thoroughly dried. The surface of the skin should be made to glow during this drying, and the extremities should be warm. A cotton jacket should be applied to the chest, and if the temperature is high or the nervous symptoms prominent, cold sponging or the cold pack should be used, with ice to the head and spine. The surface should be kept pink; if necessary, by the use of mustard paste locally. No poultice should be permitted, as it prevents the radiation of the heat and by its weight impedes respiration and the pores of the skin are closed by it. When the fever is high or the child is nervous phenacetin may be given in 1 or 2 grain doses every four hours. If the cough is severe or the pain much in evidence Dover's powder in occasional doses is useful, but should be only used as needed.

The child should be kept in a well-lighted and ventilated room and in a reclining posture most of the time, but its position should be changed frequently to avoid any tendency to hypostasis. In order that the supply of oxygen be more certain the child should be often carried to another room, and the sick room freely ventilated. The medicine should be given separate from the food to avoid aggravating the anorexia. If the stomach is not able to digest the food it should be predigested and given at longer intervals than the usual periods of three hours. It should be kept in mind that much water is being evaporated from the surface, and water should be given at frequent intervals, and when stimulants are indicated wine or brandy may be added to the water as needed. If there be fermentation in the stomach and bowels a grain of calomel in divided doses, followed by a saline or castor oil, and a few doses of the sulphocarbolates will usually correct the error if the feeding be at the same time properly adjusted.

So far as medical treatment, with the hope of aborting the process is concerned, there is too little

evidence at hand to give it much credence. As a general proposition, in the usual case, the routine attention to the feeding, digestion, elimination and the adequate supply of fresh air of proper and even warmth and humidity, and the plentiful use of water, internally and externally to supply the body needs and keep the temperature from becoming hyperpyrexia fulfils the indications, and the use of drugs should be reserved for the combat of special symptoms as they arise. We have a self-limiting disease to deal with, for which drugs do not have any selective action, but we have also a patient for whom much can be done by proper nursing and careful well selected feeding, and who is liable to develop weak points in his struggle with a relentless foe, for which we can do much if we use the stomach for nutritional purposes so long as possible, and an avenue for the exhibition of drugs only when there is a definite indication to be met. We will derive better results from an active stomach than from one that is nauseated; from cold than from antipyretics and nerve sedatives; from mustard repeated every three or four hours to the surface than anodynes and expectorants; from inhalation of vapors, as of creosote, than from opium for the relief of the irritation of the mucous surfaces. All these measures are useful when other means fail, but are seldom available for routine use as the simpler means. In secondary cases and at the crisis of lobar pneumonia the patient should be very carefully watched for cardiac or respiratory failure and alcohol used freely and such other drugs as needed hypodermically.

In the discussion Dr. Gilbert, Logansport, said the practice of medicine is truly an art. It is said that medicine has become more of a science every day. It is particularly true in this disease. In the majority of instances we can diagnose the disease upon entering the room. Give the patient all possible chances of getting fresh air. Give plenty of water and try to obtain perfect relaxation. If the head is low mucus and saliva will run out of the mouth.

Dr. Fankboner, of Marion, said that in this disease we have one that requires more outside of drugs than any other disease. The case should be treated according to the temperament of the patient. It has been a good many years since I have given drugs in this disease, and in children I do not think of giving alcohol. There should be nothing on the chest more than a cotton jacket. No poultices. My whole idea is not to give very much medicine, but plenty of fresh air and good nursing.

Dr. Krebs, of Huntington, said in the treatment of pneumonia the less drugs you use the better off your patient is. Watch the heart. If the heart and circulation continue good your patient will almost always pull through. Use cardiac stimulants very sparingly and as long as the heart and circulation are good leave them alone. If you keep on stimulating the heart you will in the long run weaken it, and when there is actual need for cardiac stimulations your heart will not respond or respond very feebly to the stimulants. The temperature is of no use as a guide as to the severity of pneumonia in children. It is a well known fact that children with a very high temperature continue to sit up and play. My own child, with a temperature of 106 per rectum, evidenced no apparent discomfort and was at play.

On motion the treasurer was directed to pay the stenographer the sum of \$5 for the work of reporting the meeting.

In the evening the members of the association, with their wives and guests, to the number of 110, sat down to partake of a most sumptuous banquet furnished by the Wabash County Medical Society. Dr. McQuown made a most pleasing and witty toastmaster. Throughout the evening, between musical selections, the association was entertained by a number of toasts.

MAURICE H. KREBS, Secretary.

BOOK REVIEWS

INTERNATIONAL CLINICS. Quarterly. Vol. 3. Eighteenth series, 1908. Pp. 298. Cloth. Price, \$2.00. J. B. Lippincott Company, Philadelphia and London.

In this volume appear contributions on treatment, medicine, surgery, gynecology, pediatrics, orthopedics, psychiatry, neurology, ophthalmology, rhinology and pathology.

As worthy of especial mention we would name Scott's article on perforation in typhoid, adenoma of the thyroid gland, by G. P. Muller; diarrheal disorders of infants, by J. H. M. Knox, and Jelliffe's clinical lecture on general paresis. As to the part played by naso-pharyngeal adenoids and enlarged tonsils in the etiology of appendicitis, Kretz's position seems to us a trifle strained.

PRACTICE OF MEDICINE FOR NURSES. By George H. Hoxie, A.M., M.D., Professor of Internal Medicine in the University of Kansas, etc. With a chapter on the Technic of Nursing, by Pearl L. Laptad, Principal of the Training School for Nurses at the University of Kansas. Cloth. Pp. 284. W. B. Saunders Company, 1908.

As stated in the author's preface, this work is intended for those who care for the sick, either professionally or in the home, as an aid to the medical attendant. Believing that the function of the nurse is neither to diagnose nor prescribe, little space has been given to differential diagnosis or remedial dosage.

Practical points in pathology, bacteriology, hygiene and prophylaxis are mentioned along with the nurse's part in therapy. Certain trivial inaccuracies appear, and the chapter on surgical nursing would seem to have been written by one not as familiar with its technic as might be desired. Following a concisely written chapter on "The Care of the Patient and Sick-Room," occur one on "Emergencies," and an appendix.

DISEASES OF INFANTS AND CHILDREN. The new (2d) edition, revised. A manual of Disease of Infants and Children. By John Ruhräh, M.D., Clinical Professor of Diseases of Children, College of Physicians and Surgeons, Baltimore. *Second Revised Edition*. 12mo volume of 423 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Flexible leather, \$2.00 net.

An excellent little treatise on the subject is here presented in condensed form, which makes a handy little reference volume for both student and practitioner. By virtue of such condensation, questions of etiology, pathology, differential diagnosis, etc., are rather cursorily dealt with.

A most timely section on the subject of medical inspection of schools proves a worthy addition to the previous edition, and references to pediatric literature have been brought thoroughly up to date.

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